

SHARP SERVICE MANUAL SERVICE-ANLEITUNG

S51T3XG-P20XU

LCD PROJECTOR
LCD PROJEKTOR

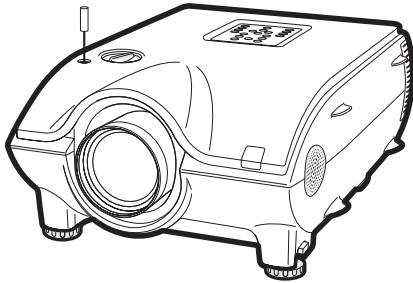


IMAGE
QUALITY

MODELS
MODELLE

XG-P20XU
XG-P20XE
XG-P20XD

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

Im Interesse der Benutzersicherheit (erforderliche Sicherheitsregeln in einigen Ländern) muß das Gerät in seinen Originalzustand gebracht werden. Außerdem dürfen für die spezifizierten Bauteile nur identische Teile verwendet werden.

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Specifications

Product type	LCD Projector
Model	XG-P20XU/XE/XD
Video system	PAL/PAL 60/PAL-M/PAL-N/SECAM/NTSC 3.58/NTSC 4.43 DTV 480P/720P/1080i
Display method	LCD panel × 3, RGB optical shutter method
LCD panel	Panel size: 1.3" (20.0 [H] × 26.6 [W] mm) Display method: Translucent TN liquid crystal panel Drive method: TFT (Thin Film Transistor) Active Matrix panel No. of dots: 786,432 dots (1,024 [H] × 768 [V])
Standard Lens	1 – 1.3 × zoom lens, F1.7 – 2.3, f = 49.1 – 63.8 mm
Projection lamp	AC 220 W lamp
Contrast ratio	600:1
Video input signal	RCA Connector: VIDEO, composite video, 1.0 Vp-p, sync negative, 75Ω terminated RCA Connector: AUDIO, 0.5 Vrms more than 22 kΩ (stereo)
S-video input signal	4-pin Mini DIN connector Y (luminance signal): 1.0 Vp-p, sync negative, 75Ω terminated C (chrominance signal): Burst 0.286 Vp-p, 75Ω terminated
Component input signal	BNC Connector (INPUT 2) Y: 1.0 Vp-p, sync negative, 75Ω terminated Pb: 0.7 Vp-p, 75Ω terminated Pr: 0.7 Vp-p, 75Ω terminated
Horizontal resolution	520 TV lines (S-video input), 750 TV lines (DTV 720P input, STRETCH mode)
RGB input signal	15-PIN MINI D-SUB CONNECTOR (INPUT 1), 5 BNC CONNECTOR (INPUT 2): RGB separate/composite sync/sync on green type analog input: 0 – 0.7 Vp-p, positive, 75Ω terminated DVI CONNECTOR (29-PIN) (INPUT 3), RGB (DIGITAL), 250 – 1,000 mV, 50Ω HORIZONTAL SYNC SIGNAL: TTL level (positive/negative) or composite sync (Apple only) VERTICAL SYNC SIGNAL: Same as above STEREO MINIJACK: AUDIO, 0.5 Vrms, more than 22 kΩ (stereo)
Pixel clock	12 – 230 MHz
Vertical frequency	43 – 200 Hz
Horizontal frequency	15 – 126 kHz
Computer control signal	9-pin D-sub connector (RS-232C Input Port/Output Port)
Speaker system	1 ⁴⁹ / ₆₄ " (4.5 cm) round × 2 2 W + 2 W (stereo) AC 100 – 240 V
Rated voltage	3.95 A
Input current	50/60 Hz
Rated frequency	330 W
Power consumption	<1,250 BTU/hour
Power dissipation	41 °F to 104 °F (+5 °C to +40 °C)
Operating temperature	–4 °F to 140 °F (–20 °C to +60 °C)
Storage temperature	Plastic
Cabinet	Radio Frequency Range: 49.825 – 49.895 MHz
GyroRemote	12 ⁹ / ₁₆ " (W) × 6 ³ / ₃₂ " (H) × 16 ²¹ / ₃₂ " (D) (319.0 × 155.0 × 423.0 mm) (main body only)
Dimensions (approx.)	12 ¹¹ / ₃₂ " (W) × 7 ²⁷ / ₆₄ " (H) × 17 ¹⁵ / ₆₄ " (D) (322.5 × 188.5 × 438.0 mm) (including standard lens, adjustment feet and projecting parts)
Weight (approx.)	21.0 lbs. (9.5 kg)
Supplied accessories	GyroRemote, Four AAA size batteries, Power cord (11'10", 3.6 m), RGB cable (9'10", 3 m), USB mouse control cable (3'3", 1 m), Computer audio cable (9'10", 3 m), ø 2.5 – ø 3.5 mm wired remote control cable (6 ⁴⁵ / ₆₄ ", 15 cm), Three BNC-RCA adaptors, Extra air filter, Lens cap, CD-ROM, LCD projector operation manual, LCD projector quick guide, Sharp Advanced Presentation Software operation manual, ID number seal
Replacement parts	Standard lens unit (CLNS-0236CE01), Lamp unit (Lamp/cage module) (BQC-XGP20X/1), GyroRemote (RRMCG1631CESA for XG-P20XU, RRMCG1653CESA for XG-P20XE, CRMCG1654DE02 for XG-P20XD), AAA size batteries, Power cord (QACCU5013CEZZ, QACCL3022CEZZ, QACCV4002CEZZ, QACCB5024CENA), RGB cable (QCNW-5304CEZZ), USB mouse control cable (QCNW-5916CEZZ), Computer audio cable (QCNW-4870CEZZ), ø 2.5 – ø 3.5 mm wired remote control cable (QCNW-5943CEZZ), BNC-RCA adaptors (QPLGJ0107GEZZ), Air filter (PFILD0080CEZZ), Lens cap (PCAPH1056CESA), CD-ROM (UDSKA0043CEN1 for XG-P20XU, UDSKA0045CEN1 for XG-P20XE/XD), LCD projector operation manual (TINS-7354CEZZ for XG-P20XU, TiNS-7403CEZZ for XG-P20XE, TiNS-7409CEZZ for XG-P20XD), LCD projector quick guide (TINS-7355CEZZ for XG-P20XU, TINS-7404CEZZ/TiNS-7405CEZZ for XG-P20XE, TiNS-7500CEZZ for XG-P20XD), Sharp Advanced Presentation Software operation manual (TINS-7356CEZZ for XG-P20XU, TiNS-7406CEZZ for XG-P20XE, TiNS-7407CEZZ for XG-P20XD), ID number seal (TLABZ0781CEZZ)

This SHARP projector uses LCD (Liquid Crystal Display) panels. These very sophisticated panels contain 786,432 pixels (×RGB) TFTs (Thin Film Transistors). As with any high technology electronic equipment such as large screen TVs, video systems and video cameras, there are certain acceptable tolerances that the equipment must conform to.

This unit has some inactive TFTs within acceptable tolerances which may result in illuminated or inactive dots on the picture screen. This will not affect the picture quality or the life expectancy of the unit. If you have any questions about this matter, please call toll free 1-888-GO-SHARP (1-888-467-4277). U.S.A. ONLY

Specifications are subject to change without notice.

IMPORTANT SERVICE SAFETY NOTES (for USA)

- Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and servicing guidelines as follows:

WARNING

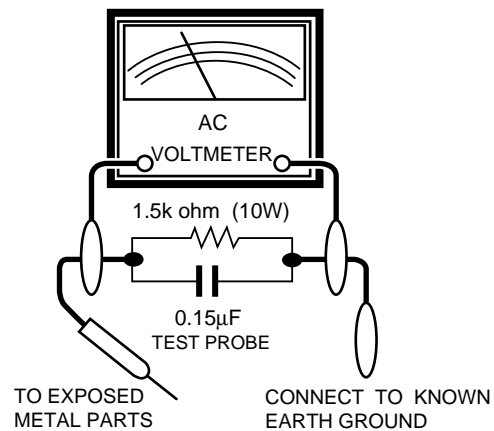
1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.

BEFORE RETURNING THE PROJECTOR: (Fire & Shock Hazard)

Before returning the projector to the user, perform the following safety checks:

1. Inspect lead wires are not pinched between the chassis and other metal parts of the projector.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for current leakage in the following manner:
 - Plug the AC cord directly into a 120-volt AC outlet, (Do not use an isolation transformer for this test).
 - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 μ F capacitor in parallel between all exposed metal cabinet parts and earth ground.

- Use an AC voltmeter with sensitivity of 5000 ohm per volt., or higher, sensitivity to measure the AC voltage drop across the resistor (See Diagram).
- All checks must be repeated with the AC plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these checks.)
Any reading of 0.3 volts RMS (this corresponds to 0.2 milliamp. AC.) or more is excessive and indicates a potential shock hazard which must be corrected before returning the unit to the owner.



SAFETY NOTICE

Many electrical and mechanical parts in LCD Projector have special safety-related characteristics.

These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by “ Δ ” and shaded areas in the Replacement Parts Lists and Schematic Diagrams. For continued protection, replacement parts must be identical to those used in the original circuit. The use of a substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire or other hazards.

AVIS POUR LA SECURITE

De nombreuses pièces, électriques et mécaniques, dans les projecteur à LCD présentent des caractéristiques spéciales relatives à la sécurité, qui ne sont souvent pas évidentes à vue.

Le degré de protection ne peut pas être nécessairement augmentée en utilisant des pièces de remplacement étalonnées pour haute tension, puissance, etc.

Les pièces de remplacement qui présentent ces caractéristiques sont identifiées dans ce manuel; les pièces électriques qui présentent ces particularités sont identifiées par la marque “ Δ ” et hachurées dans la liste des pièces de remplacement et les diagrammes schématiques. Pour assurer la protection, ces pièces doivent être identiques à celles utilisées dans le circuit d'origine. L'utilisation de pièces qui n'ont pas les mêmes caractéristiques que les pièces recommandées par l'usine, indiquées dans ce manuel, peut provoquer des électrocutions, incendies ou autres accidents.

WARNING: The bimetallic component has the primary conductive side exposed. Be very careful in handling this component when the power is on.

AVERTISSEMENT: La composante bimétallique dispose du conducteur primaire dénudé. Faire attention lors de la manipulation de cette composante sous tension.

NOTE TO SERVICE PERSONNEL

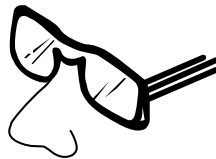
UV-RADIATION PRECAUTION

The light source, metal halide lamp, in the LCD projector emits small amounts of UV-Radiation.

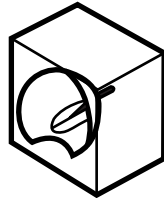
AVOID DIRECT EYE AND SKIN EXPOSURE.

To ensure safety please adhere to the following:

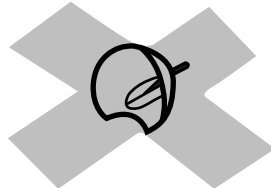
1. Be sure to wear sun-glasses when servicing the projector with the lamp turned "on" and the top enclosure removed.



2. Do not operate the lamp outside of the lamp housing.



3. Do not operate for more than 2 hours with the enclosure removed.



UV-Radiation and Medium Pressure Lamp Precautions

1. Be sure to disconnect the AC plug when replacing the lamp.
2. Allow one hour for the unit to cool down before servicing.
3. Replace only with same type lamp. Type CLMPF0072DE02 or BQC-XGP20X//1 rated 85V/220W.
4. The lamp emits small amounts of UV-Radiation, avoid direct-eye contact.
5. The medium pressure lamp involves a risk of explosion. Be sure to follow installation instructions described below and handle the lamp with care.

NOTE POUR LE PERSONNEL D'ENTRETIEN

PRECAUTION POUR LES RADIATIONS UV

La source de lumière, la lampe métal halide, dans le projecteur LCD émet de petites quantités de radiation UV.

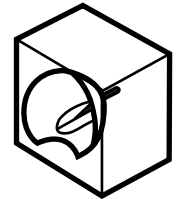
EVITEZ TOUTE EXPOSITION DIRECTE DES YEUX ET DE LA PEAU.

Pour votre sécurité, nous vous prions de respecter les points suivants:

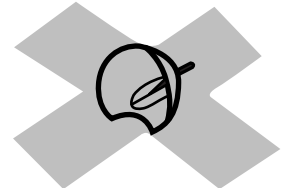
1. Toujours porter des lunettes de soleil lors d'un entretien du projecteur avec la lampe allumée et le haut du coffret retiré.



2. Ne pas faire fonctionner la lampe à l'extérieur du boîtier de lampe.



3. Ne pas faire fonctionner plus de 2 heures avec le coffret retiré.



Précautions pour les radiations UV et la lampe moyenne pression

1. Toujours débrancher la fiche AC lors du remplacement de la lampe.
2. Laisser l'unité refroidir pendant une heure avant de procéder à l'entretien.
3. Ne remplacer qu'avec une lampe du même type. Type CLMPF0072DE02 ou BQC-XGP20XU//1 caractéristique 85V/220W.
4. La lampe émet de petites quantités de radiation UV-éviter tout contact direct avec les yeux.
5. La lampe moyenne pression implique un risque d'explosion. Toujours suivre les instructions d'installation décrites ci-dessous et manipuler la lampe avec soin.

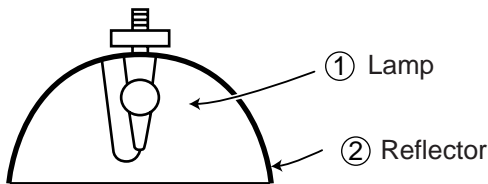
UV-RADIATION PRECAUTION (Continued)

■ Lamp Replacement

Note:

Since the lamp reaches a very high temperature during units operation replacement of the lamp should be done at least one hour after the power has been turned off. (to allow the lamp to cool off.) Installing the new lamp, make sure not to touch the lamp (bulb) replace the lamp by holding its reflector ②.

[Use original replacement only.]



DANGER ! — Never turn the power on without the lamp to avoid electric-shock or damage of the devices since the stabilizer generates high voltages at its start.

Since small amounts of UV-Radiation are emitted from an opening between the duct cover and the lamp housing, it is recommended to place the LENS CAP on the opening during servicing to avoid eye and skin exposure (Fig. 1).

Note: Please obtain a lens cap before servicing a models XG-P20XU/XE/XD that is received without one.

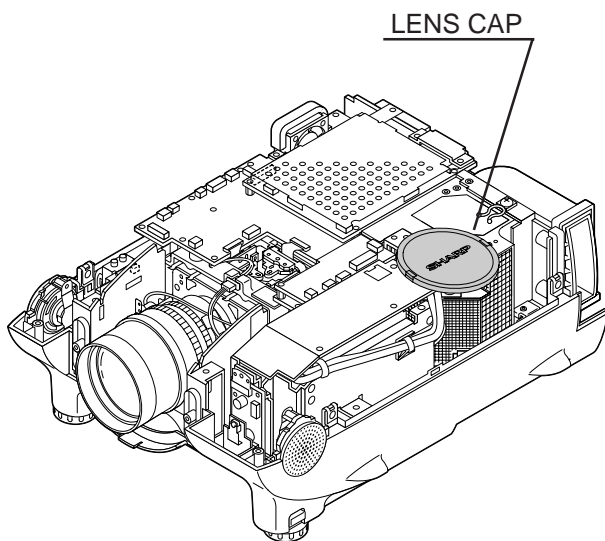


Figure 1.

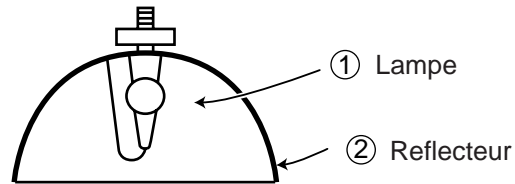
PRECAUTION POUR LES RADIATIONS UV (Suite)

■ Remplacement de la lampe

Remarque:

Comme la lampe devient très chaude pendant le fonctionnement de l'unité, son remplacement ne doit être effectué au moins une heure après avoir coupé l'alimentation (pour permettre à la lampe de refroidir). En installant la nouvelle lampe, s'assurer de ne pas toucher la lampe (ampoule). Remplacer la lampe en tenant son réflecteur ②.

[N'utiliser qu'un remplacement d'origine.]



DANGER ! — Ne jamais mettre sous tension sans la lampe pour éviter un choc électrique ou des dommages des appareils car le stabilisateur génère de hautes tensions à sa mise en route.

Comme de petites quantités de radiation UV sont émises par une ouverture entre le couvercle du conduit et le boîtier de la lampe, il est recommandé de placer le CAPUCHON D'OPTIQUE sur l'ouverture pendant l'entretien pour éviter une exposition des yeux et la peau (Fig. 1).

Remarque: Prière de se procurer un capuchon d'optique avant d'entretien un modèle XG-P20XU/XE/XD qui est livré sans.

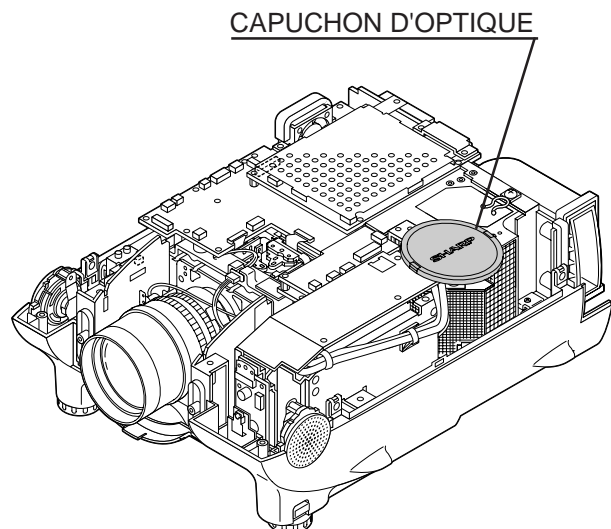




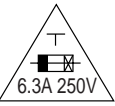
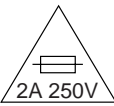


Figure 1.

WARNING: High brightness light source, do not stare into the beam of light, or view directly. Be especially careful that children do not stare directly in to the beam of light.





WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO MOISTURE OR WET LOCATIONS.

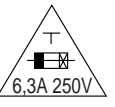
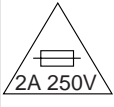
	CAUTION RISK OF ELECTRIC SHOCK. DO NOT REMOVE SCREWS EXCEPT SPECIFIED USER SERVICE SCREW		 <p>The lighting flash with arrowhead within a triangle is intended to tell the user that parts inside the product are risk of electric shock to persons.</p>
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE CABINET. NO USER-SERVICEABLE PARTS EXCEPT LAMP UNIT. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.			 <p>The exclamation point within a triangle is intended to tell the user that important operating and servicing instructions are in the manual with the projector.</p>

CAUTION (INLET Unit)  6.3A 250V For continued protection against a risk of fire, replace only with same type 6.3A 250V fuse. (F791)	CAUTION (Active Filter Unit)  2A 250V For continued protection against a risk of fire, replace only with same type P110A, ANZEN DENGU, 2A, 250V 117°C fuse.(TF701)	CAUTION (BALLST Unit) For continued protection against a risk of fire, replace only with same type P110A, ANZEN DENGU, 2A, 250V 117°C fuse.(THP1701)
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AVERTISSEMENT: Source lumineuse de grande intensité. Ne pas fixer le faisceau lumineux ou le regarder directement. Veiller particulièrement à éviter que les enfants ne fixent directement le faisceau lumineux.

AVERTISSEMENT: AFIN D'EVITER TOUT RISQUE D'INCENDIE OU D'ELECTROCUTION, NE PAS PLACER CET APPAREIL DANS UN ENDROIT HUMIDE OU MOUILLE.

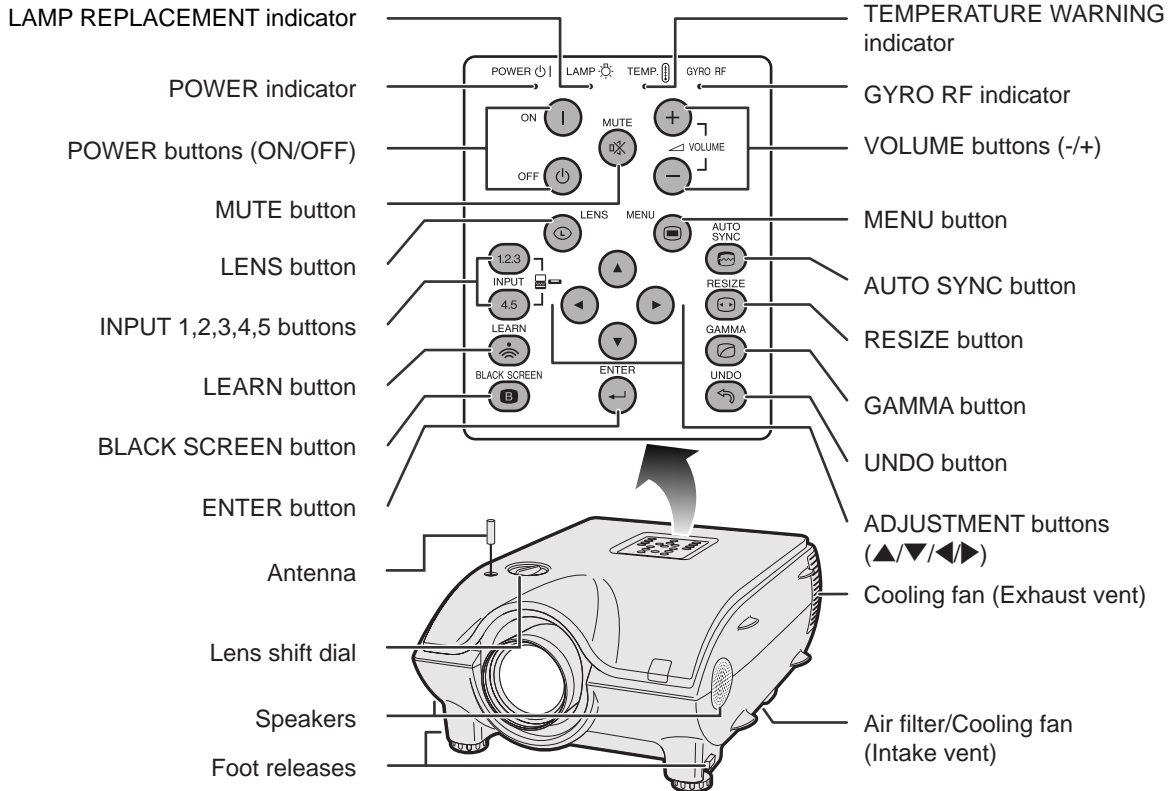
	ATTENTION RISQUE D'ELECTROCUTION NE PAS RETIRER LES VIS, A L'EXCEPTION DES VIS DE REPARATION UTILISATEUR SPECIFIEES		 <p>L'éclair terminé d'une flèche à l'intérieur d'un triangle indique à l'utilisateur que les pièces se trouvant dans l'appareil sont susceptibles de provoquer une décharge électrique.</p>
ATTENTION: POUR EVITER TOUT RISQUE D'ELECTROCUTION, NE PAS RETIRER LE CAPOT. AUCUNE DES PIECES INTERIEURES N'EST REPARABLE PAR L'UTILISATEUR, A L'EXCEPTION DE L'UNITE DE LAMPE. POUR TOUTE REPARATION, S'ADRESSER A UN TECHNICIEN D'ENTRETIEN QUALIFIE.			 <p>Le point d'exclamation à l'intérieur d'un triangle indique à l'utilisateur que les instructions de fonctionnement et d'entretien sont détaillées dans les documents fournis avec le projecteur.</p>

PRECAUTION (Unité d'admission)  6.3A 250V Pour une protection continue contre les risques d'incendie, ne remplacer qu'avec un fusible 6,3A 250V du même type. (F791)	PRECAUTION (Unité de filtration active)  2A 250V Pour une protection continue contre un risques d'incendie, ne remplacer qu'avec un fusible P110A, ANZEN DENGU 2A 250V, 117°C du même type. (TF701)	PRECAUTION (Unité de PUTSSANCE) Pour une protection continue contre un risques d'incendie, ne remplacer qu'avec un fusible P110A, ANZEN DENGU 2A 250V, 117°C du même type. (THP1701)
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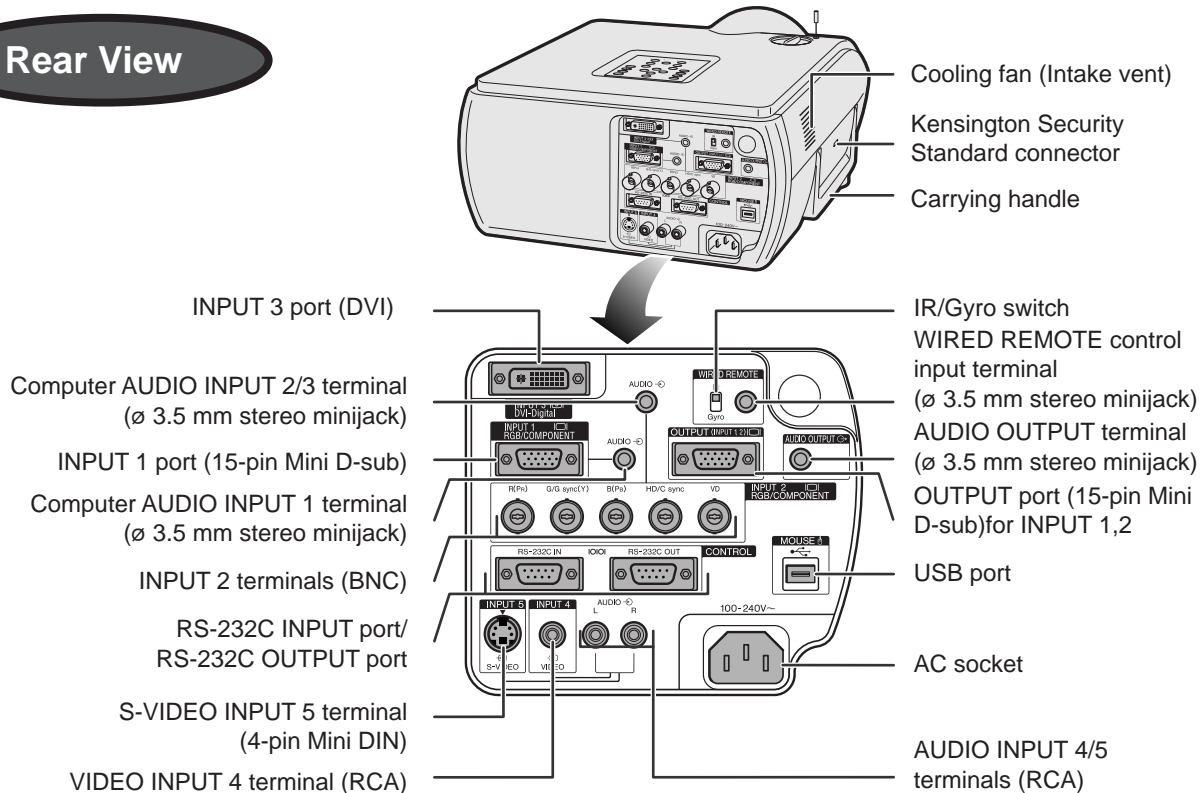
Location of Controls

Projector

Front View



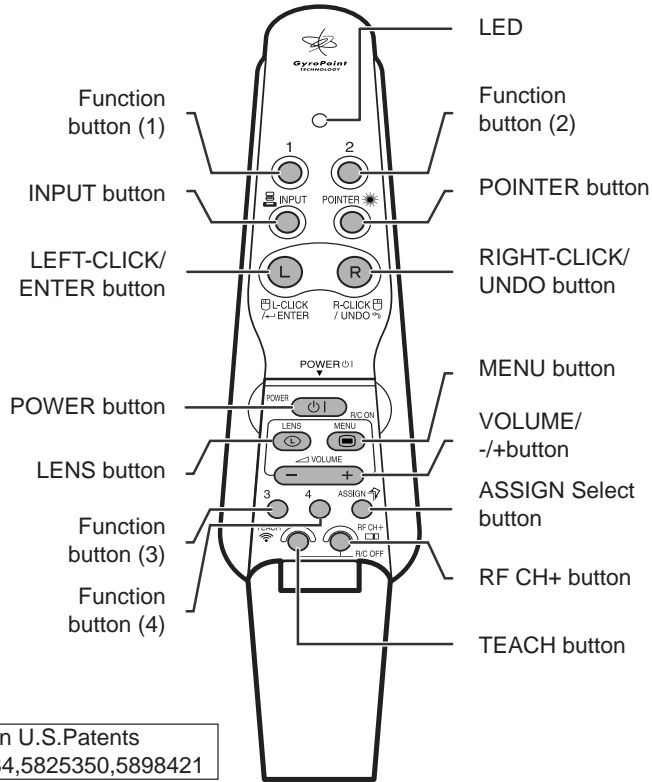
Rear View



Operating the Wireless Mouse Remote Control

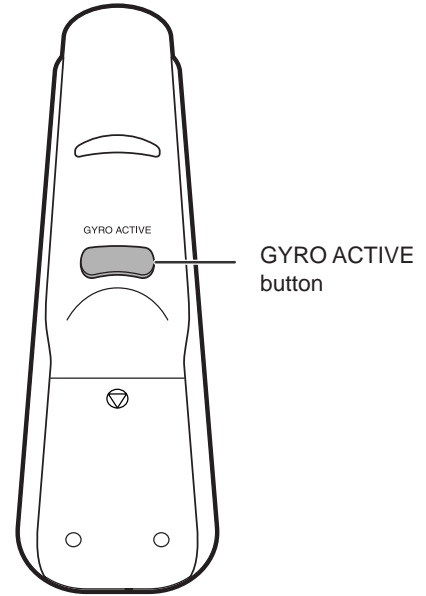
Remote Control

Front View

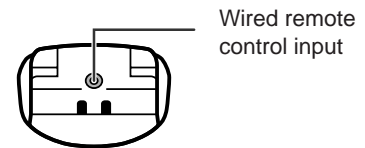


Gyration U.S. Patents
5698784, 5825350, 5898421

Rear View

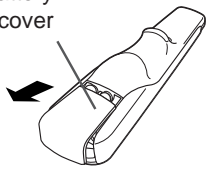
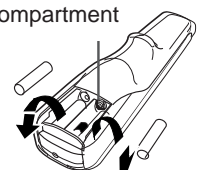
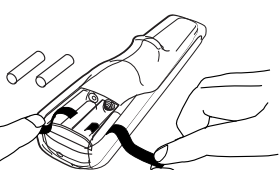



Bottom View



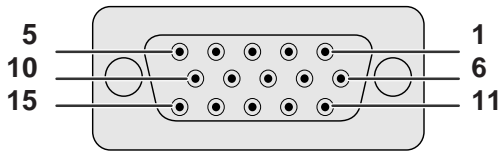
Inserting and removing the batteries

Batteries are not pre-installed at the factory. When inserting batteries for the first time, follow steps 1, 3 and 4 below.

<p>1 Press in on the arrow mark and slide in the direction of the arrow to remove the battery cover.</p>	<p>2 Remove the two upper batteries and pull the tapes to pick up two other batteries at the bottom of the compartment.</p>	<p>3 Insert four AAA size batteries, making sure the polarities match the + and - marks inside the battery compartment and the batteries are placed on the tapes.</p>	<p>4 Insert the side tabs of the battery cover into the slots and press the cover in until it is properly seated.</p>
<p>Battery cover</p> 	<p>Battery compartment</p> 		<p>Battery cover</p> 

Connection Pin Assignments

INPUT 1 RGB and OUTPUT (INPUT 1, 2) Signal Ports: 15-pin Mini D-sub female connector



RGB Input

Analog

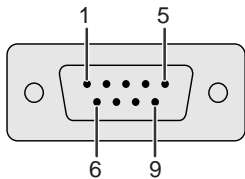
- | | |
|-------------------------------------|---------------------------|
| 1.Video input (red) | 8.Earth (blue) |
| 2.Video input (green/sync on green) | 9.Not connected |
| 3.Video input (blue) | 10.GND |
| 4.Reserve input 1 | 11.GND |
| 5.Composite sync | 12.Bi-directional data |
| 6.Earth (red) | 13.Horizontal sync signal |
| 7.Earth (green/sync on green) | 14.Vertical sync signal |
| | 15.Data clock |

Component Input

Analog

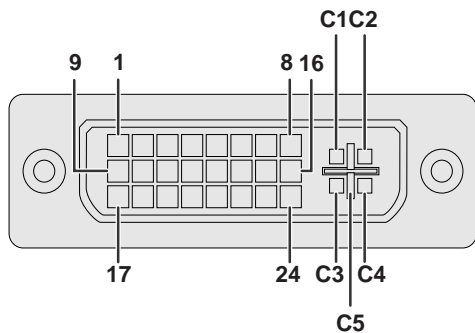
- | | |
|-----------------|------------------|
| 1.PR (CR) | |
| 2.Y | 9.Not connected |
| 3.PB (CB) | 10.Not connected |
| 4.Not connected | 11.Not connected |
| 5.Not connected | 12.Not connected |
| 6.Earth (PR) | 13.Not connected |
| 7.Earth (Y) | 14.Not connected |
| 8.Earth (PB) | 15.Not connected |

RS-232C Port: 9-pin D-sub male connector of the DIN-D-sub RS-232C cable



Pin No.	Signal	Name	I/O	Reference
1	CD			Not connected
2	RD	Receive Data	Input	Connected to internal circuit
3	SD	Send Data	Output	Connected to internal circuit
4	ER			Not connected
5	SG	Signal Ground		Connected to internal circuit
6	DR	Data Set Ready	Output	Output Not connected
7	RS	Request to Send	Output	Output Connected to internal circuit
8	CS	Clear to Send	Input	Connected to internal circuit
9	CI			Not connected

INPUT 3 DVI Port: 29-pin

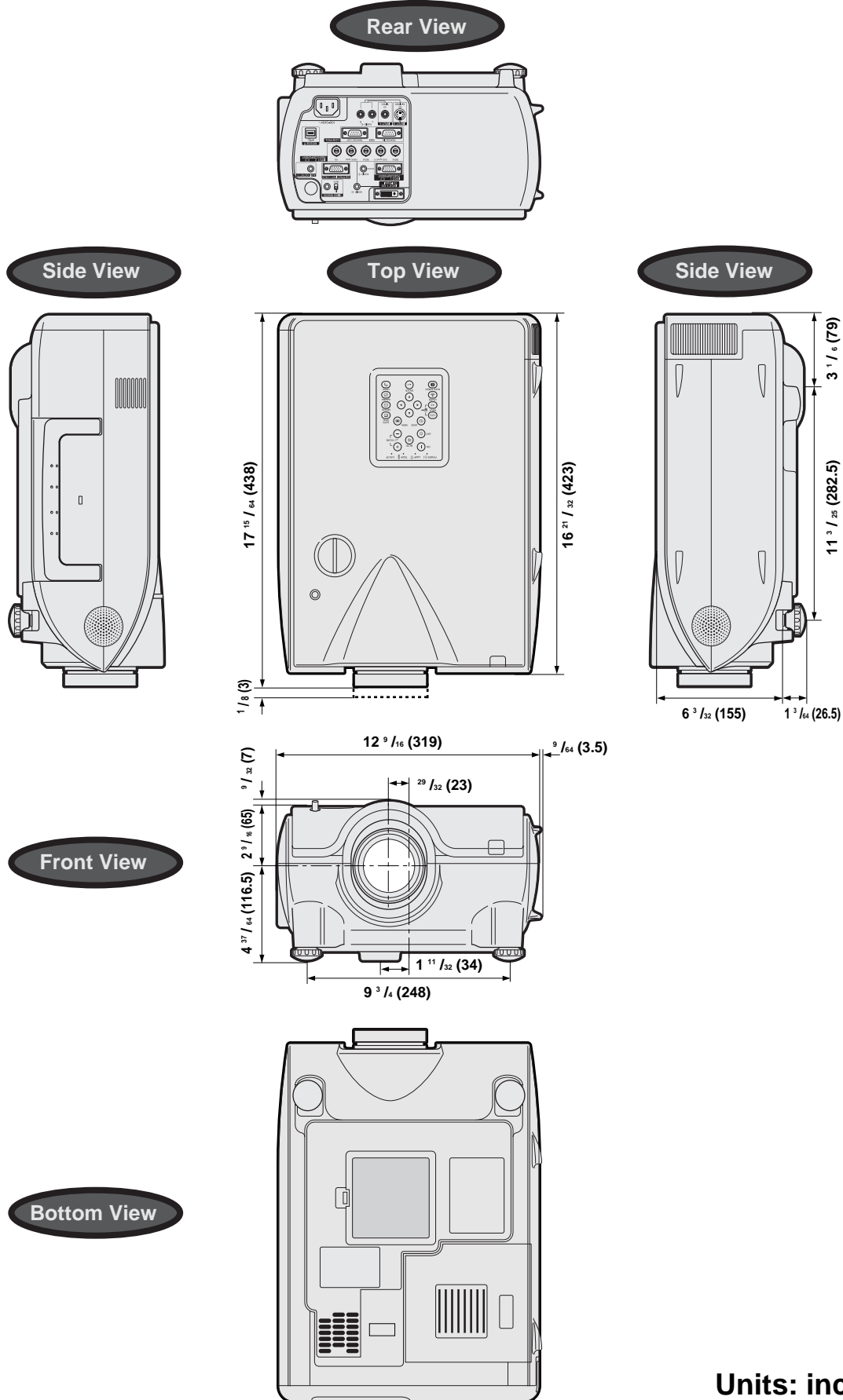


Pin No.	Name
1	T.M.D.S.Data 2-
2	T.M.D.S.Data 2+
3	T.M.D.S.Data 2/4 Shield
4	T.M.D.S.Data 4- *3
5	T.M.D.S.Data 4+ *3
6	DDC Clock
7	DDC Data
8	Analog Vertical Sync
9	T.M.D.S.Data 1-
10	T.M.D.S.Data 1+
11	T.M.D.S.Data 1/3 Shield
12	T.M.D.S.Data 3-*3
13	T.M.D.S.Data 3+*3
14	+5 V Power
15	Ground*1
16	Hot Plug Detect
17	T.M.D.S.Data 0-
18	T.M.D.S.Data 0+
19	T.M.D.S.Data 0/5 Shield
20	T.M.D.S.Data 5- *3
21	T.M.D.S.Data 5+ *3
22	T.M.D.S.Clock Shield
23	T.M.D.S.Clock+
24	T.M.D.S.Clock-
C1	Analog Red
C2	Analog Green
C3	Analog Blue
C4	Analog Horizontal sync
C5	Analog Ground*2

NOTE

- *1 Return for +5 V,Hsync.and Vsync.
- *2 Analog R,G and B return
- *3 These pins are not used on this equipment.

Dimensions

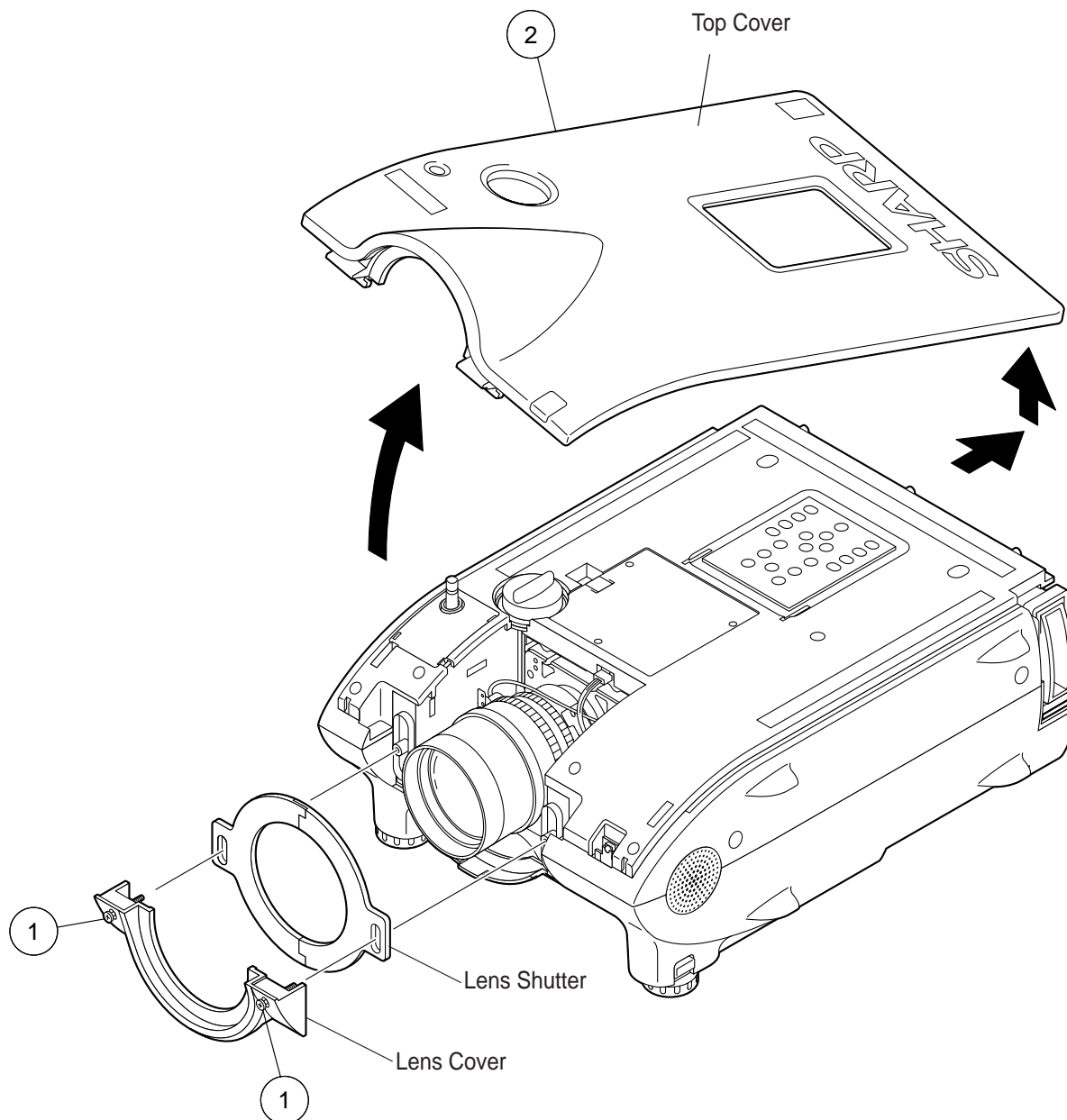


Units: inches (mm)

REMOVING OF MAJOR PARTS

1. Removing the top cover and lens cover.

- 1-1. Remove the two screws and detach the lens cover.
 - 1-2. Hold the lens top cover and tilt it up until its back end alone stays hooked. Then slide and detach the top cover.
Detach the lens shutter.
- (When attaching the lens shutter back in position, match the left (L) and right (R) markings.)

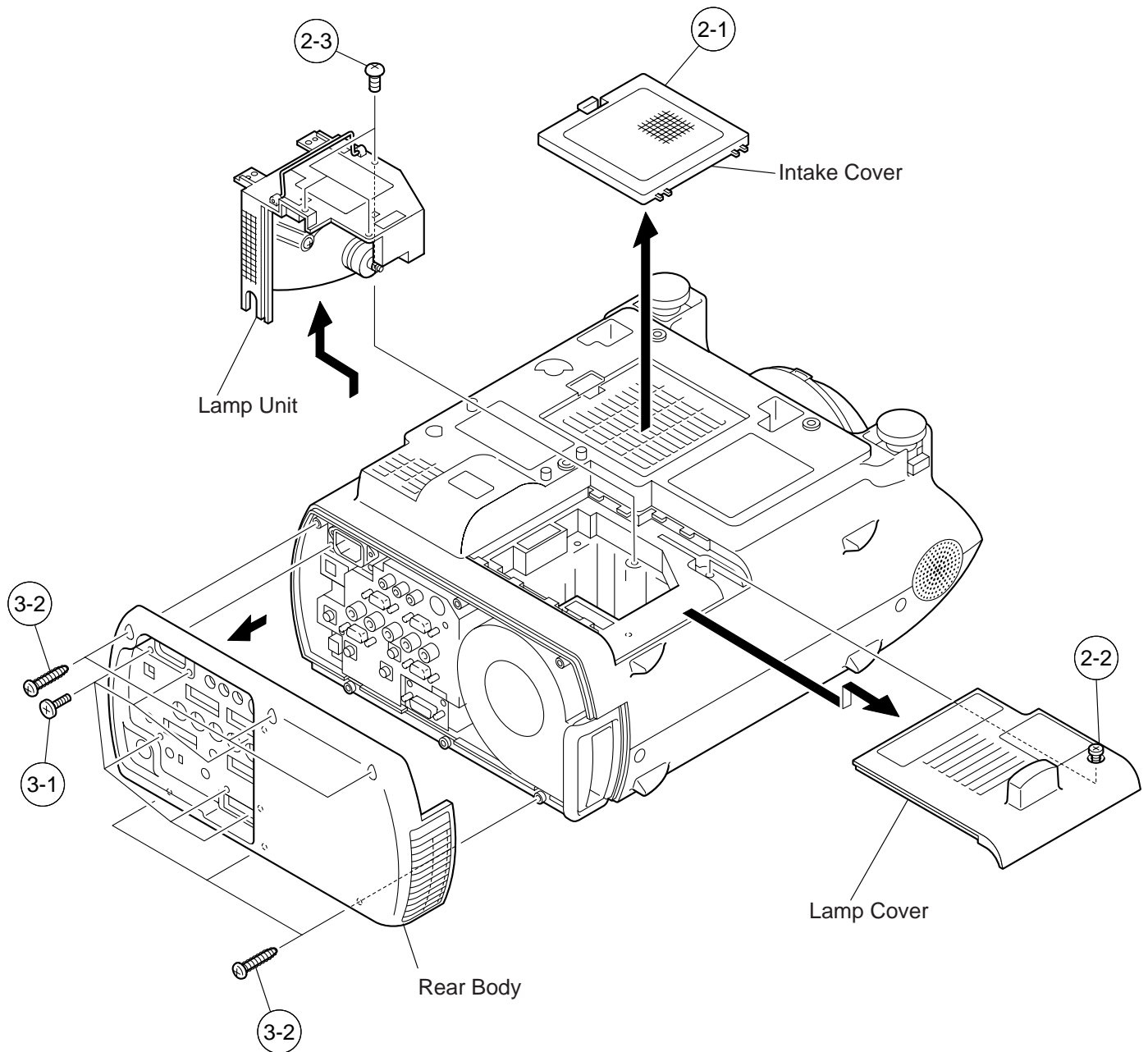


2. Removing the Intake cover and lamp unit.

- 2-1. Detach the intake cover.
- 2-2. Loosen the screw and slide the lamp cover out of position.
- 2-3. Remove the three screws and lift the lamp unit out of position.

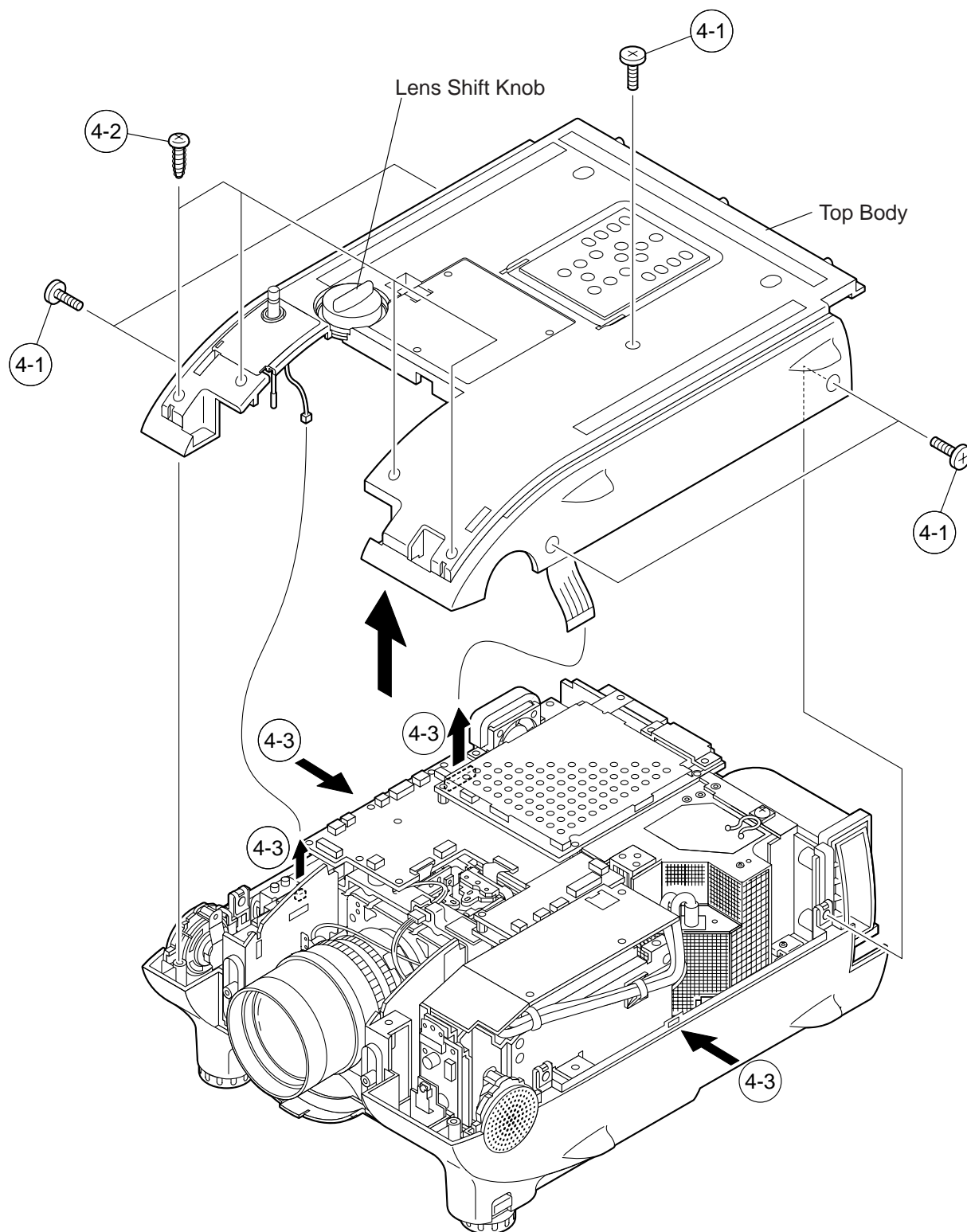
3. Removing the rear body.

- 3-1. Remove the six screws off the terminal board at the back.
- 3-2. Remove the six screws and detach the rear body.



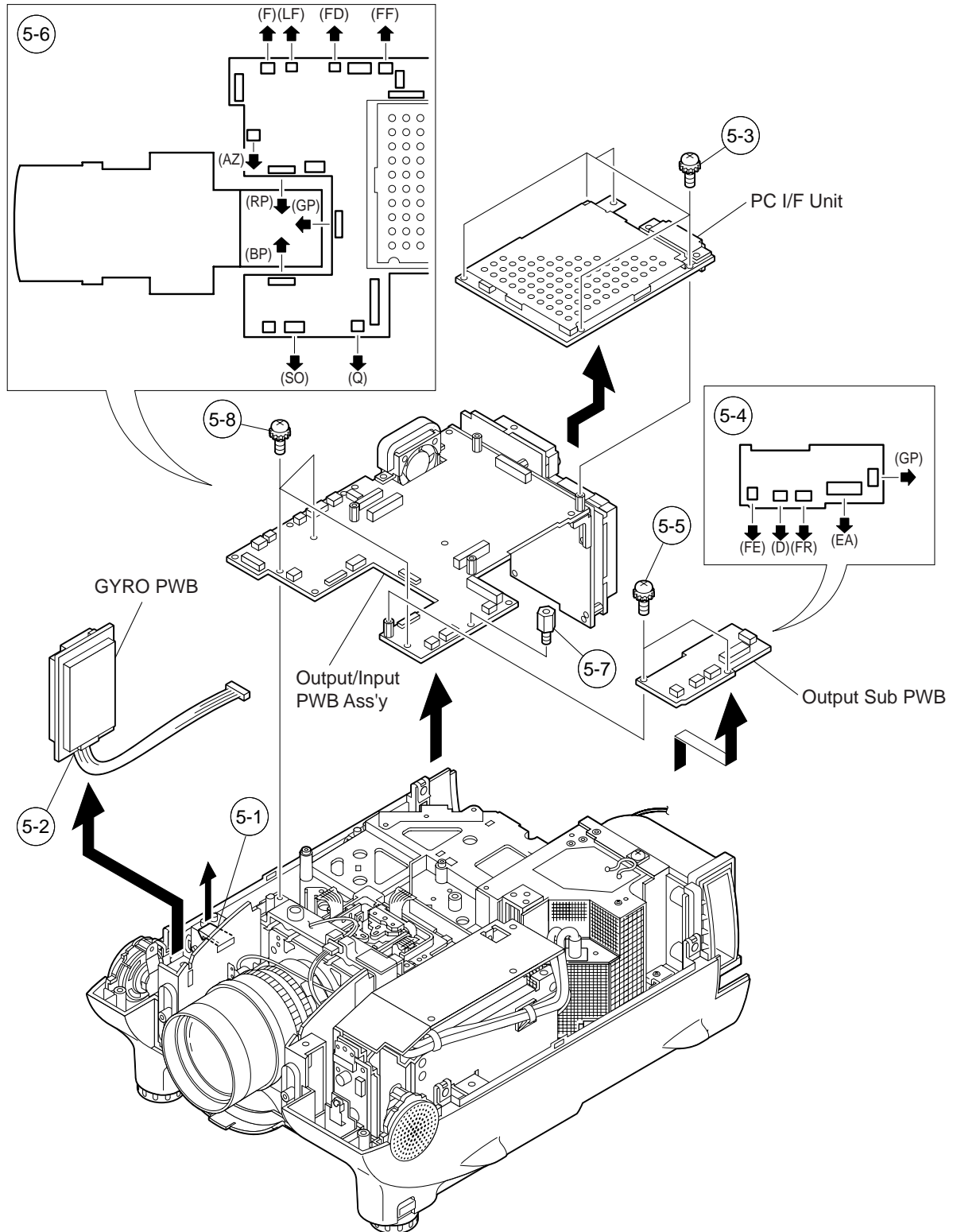
4. Removing the top panel.

- 4-1. Remove the five screws.
- 4-2. Remove the four screws.
- 4-3. Press on both sides of the set and undo the hooks. Lift the top body with lens shift knob and disconnect the two connectors.



5. Removing the PWB unit.

- 5-1. Undo the top hooks and detach the GYRO PWB.
- 5-2. Disconnect the connectors from the GYRO PWB.
- 5-3. Remove the five screws and detach the PC I/F unit.
- 5-4. Disconnect the five connectors.
- 5-5. Remove the two screws and detach the output sub-PWB.
- 5-6. Disconnect the twelve connectors.
- 5-7. Take out the hexagonal supports.
- 5-8. Remove the three screws and detach the output/input PWB assembly.

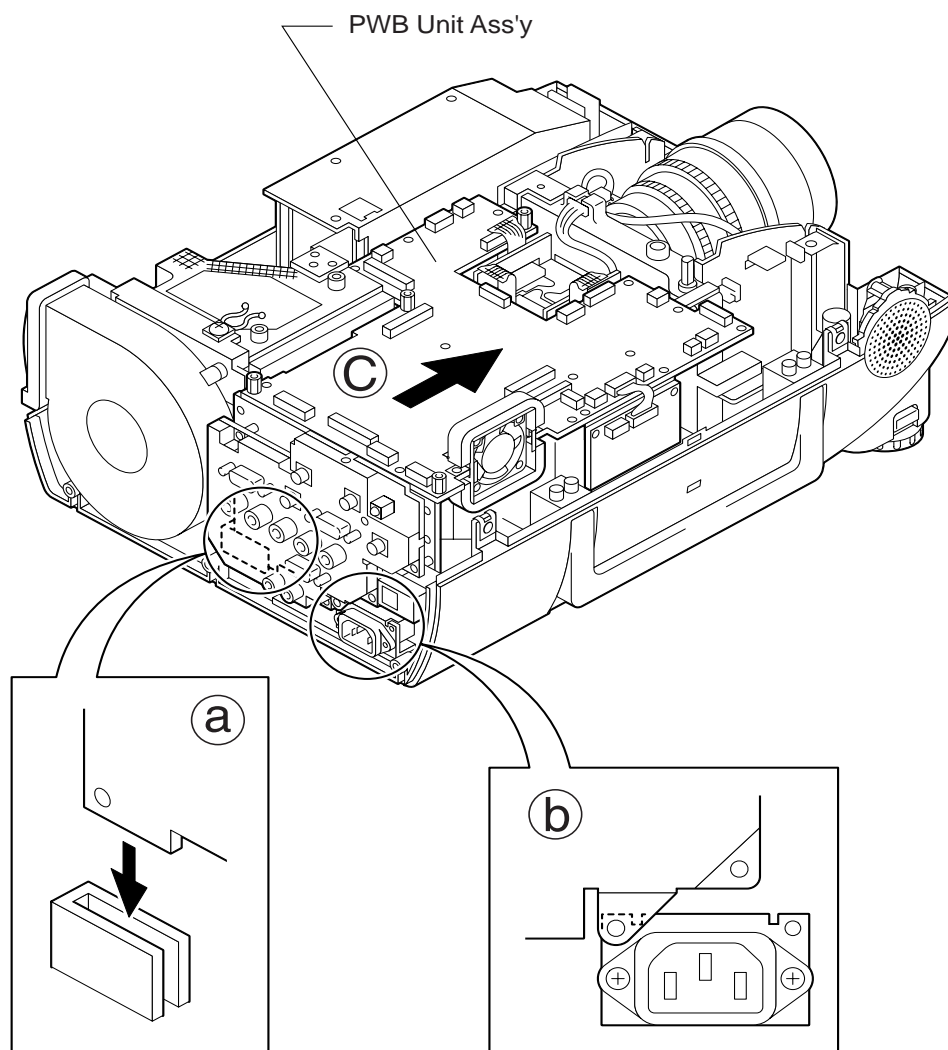


Reassembling precautions

5-9. Fit part (a) of the input PWB to the slit of the bottom cover.

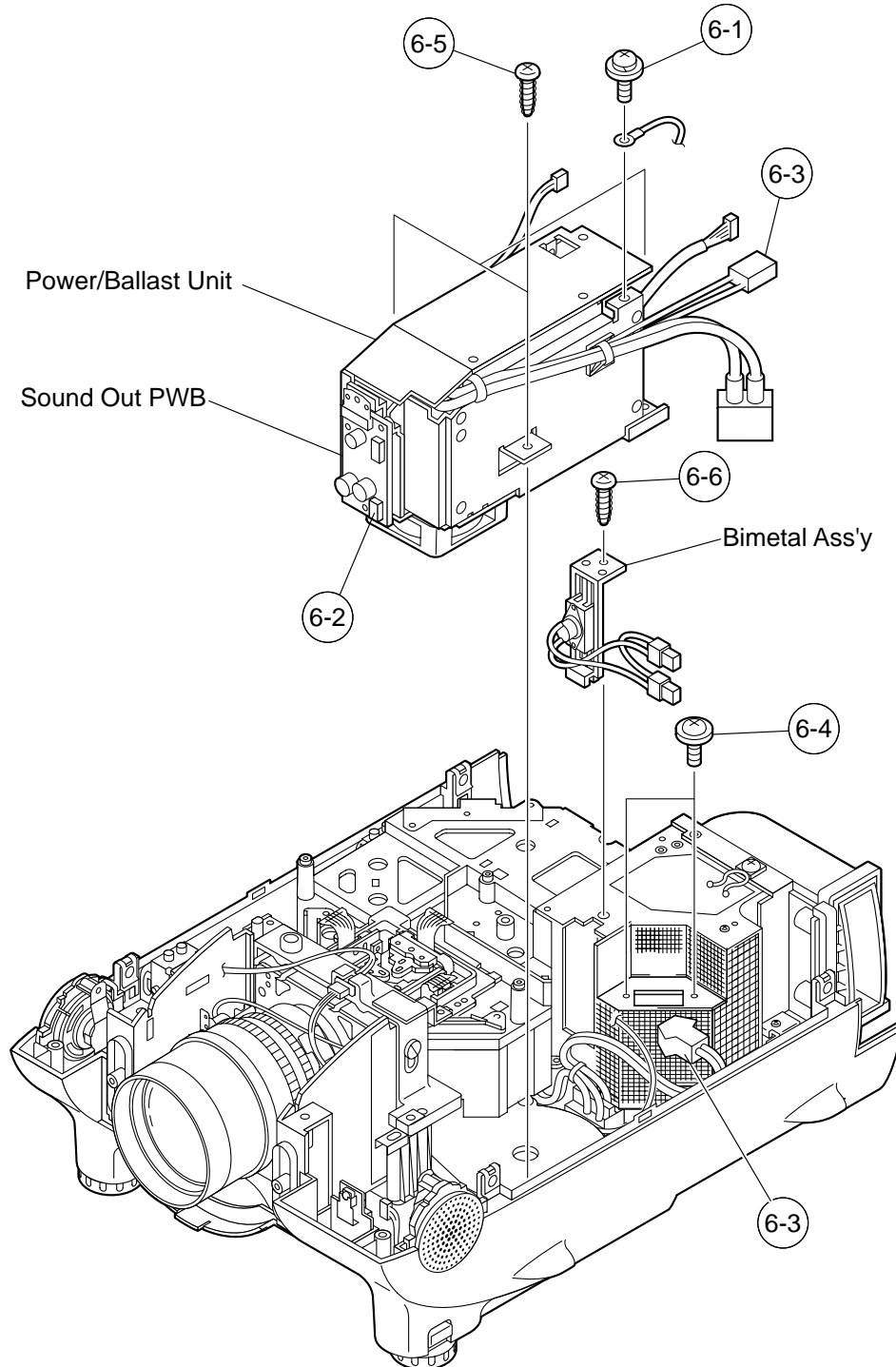
5-10. Align the input PWB's shield with the top of the AC inlet shield (b).

5-11. Before tightening up the screws (5-7) as well as the screws and hex nuts (5-8), move the PWB unit forward enough (c).



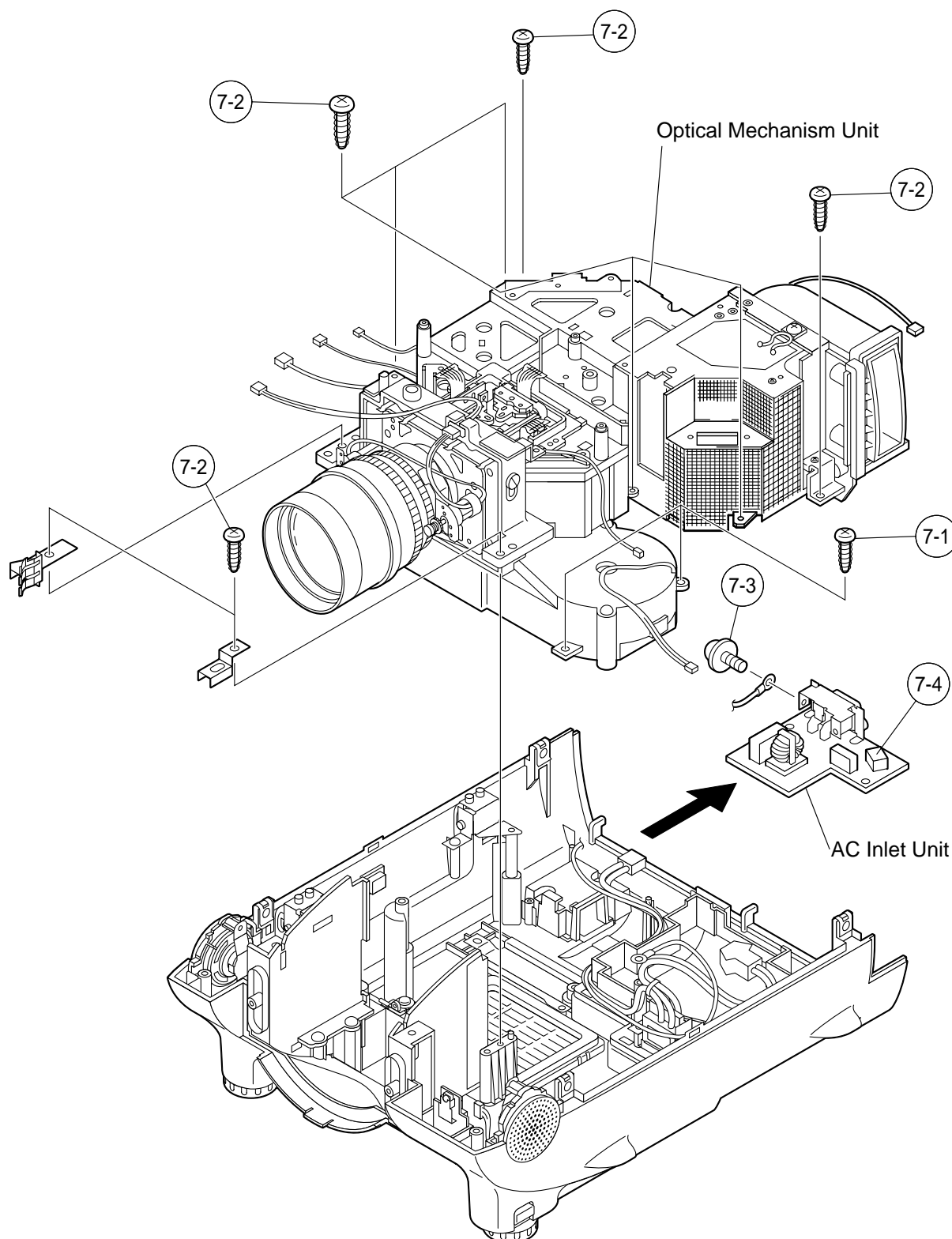
6. Removing the power / ballast / sound-out / bimetal unit assembly.

- 6-1. Remove the screw and disconnect the grounding wire from the shield case of the power/ballast unit.
- 6-2. Disconnect the connectors from the sound out PWB.
- 6-3. Take out the bimetal socket.
- 6-4. Remove the two screws and detach the lamp socket.
- 6-5. Remove the three screws and detach the power unit.
- 6-6. Remove the screw and slide the bimetal assembly upward out of position.



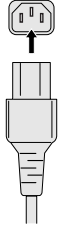
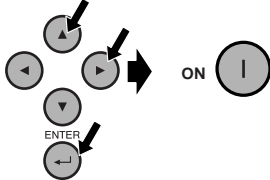

7. Removing the optical mechanism unit

- 7-1. Remove the two screws off the optical mechanism intake fan.
- 7-2. Remove the eight screws and take out the optical mechanism unit.
- 7-3. Remove the screw and disconnect the grounding wire.
- 7-4. Disconnect the connector and detach the AC inlet unit.



Resetting the TOTAL LAMP TIMER

Resetting the lamp timer

1 Connect the power cord. Plug the power cord into the AC socket of the projector. 	2 Reset the lamp timer. While pressing ▼,▶ and ENTER on the projector,press POWER ON on the projector. 	"LAMP 0000H" is displayed, indicating that the lamp timer is reset. 
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NOTE

- Reset the lamp timer only after replacing the lamp.

CAUTION

- Intense light hazard. Do not attempt to look into the aperture and lens while the projector is operating.

NOTE

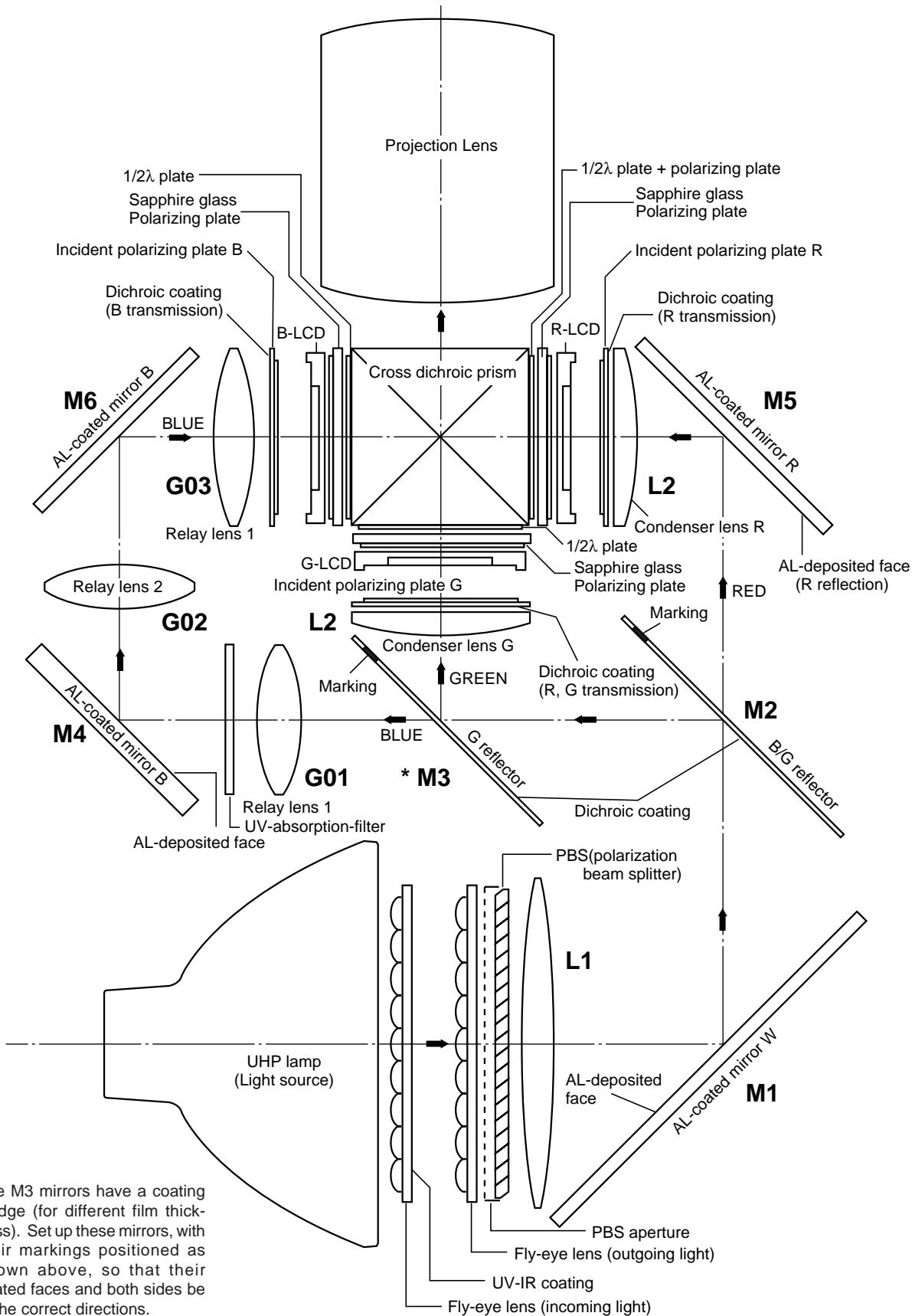
- As the usage environment can vary significantly, the projector lamp may not operate for 1,500 hours.

Maintenance Indicator	Condition	Problem	Possible Solution
TEMPERATURE WARNING indicator	The internal temperature is abnormally high.	• Blocked air intake.	• Relocate the projector to an area with proper ventilation.
		• Clogged air filter.	• Clean the filter.
		• Cooling fan breakdown.	• Take the projector to your nearest Authorized Sharp Industrial LCD Products Dealer or Service Center for repair.
		• Internal circuit failure.	
LAMP REPLACE- MENT indicator	The lamp does not light up.	• Burnt-out lamp. • Lamp circuit failure.	• Carefully replace the lamp. • Take the projector to your nearest Authorized Sharp Industrial LCD Products Dealer or Service Center for repair.
POWER indicator	The POWER indicator flashes in red when the projector is on.	• The bottom filter cover is open.	• Securely install the bottom filter cover.

THE OPTICAL UNIT OUTLINE

Layout of the optical system

Note: Layout for positioning the optical system.



* The M3 mirrors have a coating wedge (for different film thickness). Set up these mirrors, with their markings positioned as shown above, so that their coated faces and both sides be in the correct directions.

CONVERGENCE AND FOCUS ADJUSTMENT

- Start the convergence and focus adjustments with the top cabinet and the LCD cover removed but the power on. Use the remote control to adjust the image. Take the following procedures.

1. Focusing the projection lens

(A) Replacing all the 3 LCD panels

1. Before replacing all the 3 LCD panels, project an image on the screen and bring it into focus.
2. Replace the panels with new ones. But until the focus has been completely readjusted, be careful not to change the distance between the set and the screen, nor to move the projection lens focus and zoom rings.

If the focus is readjusted with a different positional relation, the relation between the projection distance and the screen size is affected. In other words, a short-distance image (40 WIDE, for example) may get out of the focus range, or a long-distance image (300 WIDE, for example) may come out of focus.

(B) Replacing 1 or 2 of the 3 LCD panels

1. In adjusting the focus after replacement of one or two LCD panels, project an image on the screen and turn the projection lens focus ring to get the non-replaced LCD panel into focus.
2. But until the focus has been completely adjusted for the new LCD panels, be careful not to change the distance between the set and the screen, nor to move the projection lens focus and zoom rings.
(If the distance has been changed or the projection lens readjusted, repeat the above steps 1 and 2.)

2. Adjusting the G-LCD panel

(A) Focus adjustment. (Make this adjustment on the white-only screen.)

1. Right-and-left focus adjustment (θY direction) .
Loosen the lock screws "b" and "c" and insert the eccentric screwdriver into the notch and hole "b". Turn the screwdriver until the right and left halves on the screen get into focus.
First get the right and left halves in balance. Then improve the accuracy while making the adjustment 2 below.
2. Top-center-bottom focus adjustment (θX and Z directions).
Loosen the lock screws "a" and "c" and insert the eccentric screwdriver into the notch and hole "a" or "c". Turn the screwdriver until the top, center and bottom on the screen get into focus. In adjusting this top-to-bottom focus, temporarily tighten the lock screw "b" to fix the θY direction adjustment.
3. Repeat the above steps 1 and 2 to finely adjust the focus. Finally tighten up all the lock screws.

Notes :

- ① Carefully proceed with the focus adjustment because the adjusting directions are correlated.
- ② In adjusting the convergence and focus, do not move the projection lens zoom and focus rings until the end of all the adjustments.

(B) Convergence adjustment

- The G-LCD panel has no convergence adjustment mechanism. Use this panel as convergence adjustment reference.

3. B-LCD panel adjustment (the same for the R-LCD panel)

(A) Focus adjustment

- Take the same procedure as for the G-LCD panel focus adjustment. Note that the adjustment range is small in the Z direction. If the convergence is quite different between the B-LCD and G-LCD panels, roughly adjust the convergence first and then the focus.

(B) Convergence adjustment

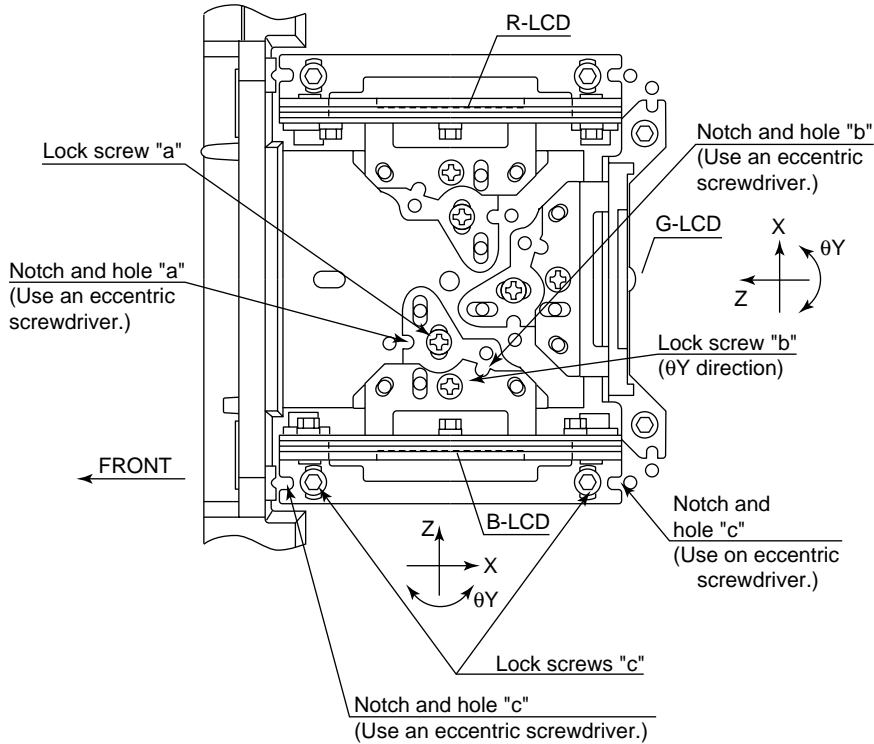
- Use a crosshatch pattern signal for this adjustment.
Make the adjustment just for the G-color and the relevant color.
- (1) Loosen the convergence lock screw "d".
- (2) With the G-LCD panel's screen center as reference, adjust the B-LCD panel in the X , Y and θZ directions.
- (3) Finally tighten up the convergence lock screw "d".

Notes :

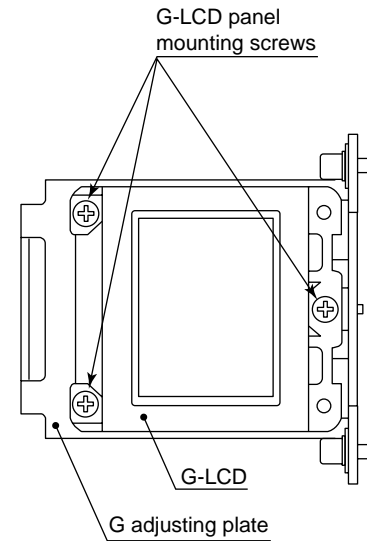
- ① The eccentric cam is used for convergence adjustment. This means that the cam's turning and the linear movement are not always uniform.
- ② This model is not equipped with the LCD image adjustment mechanism. This is because the dichroic prism is used for image formation. When the LCD panels all get into the best focus, the images are almost completely converged.

Convergence and Focus Adjustments Mechanism

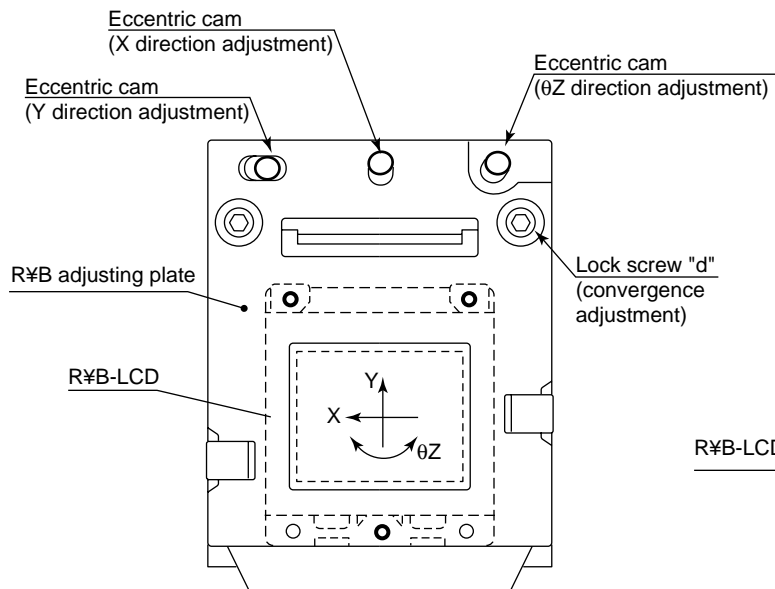
TOP VIEW



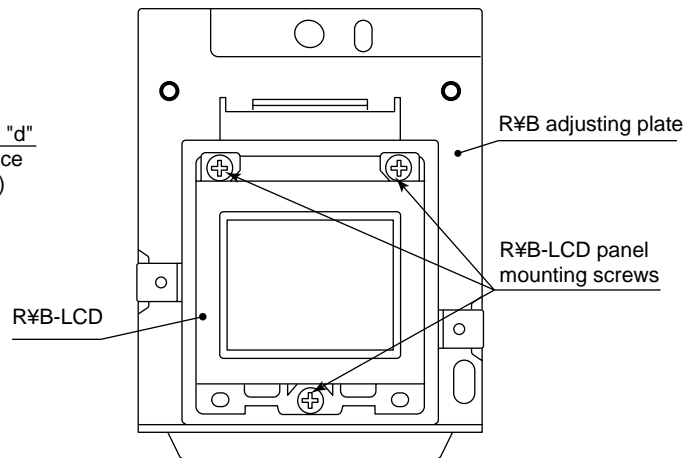
SIDE VIEW



SIDE VIEW (from inside)



SIDE VIEW (from outside)



Convergence and Focus Adjustments at a Glance

Adjustment directions

Adjustment	Direction	Definition	Direction of LCD panel
Convergence	X direction		LCD right and left
	Y direction		LCD top and bottom
	θ Z direction	Rotation around Z axis	LCD turning axis
Focus	Z direction		LCD optical axis
	θ X direction	Rotation around X axis	LCD top-to-bottom flapping
	θ Y direction	Rotation around Y axis	LCD right-to-left flapping

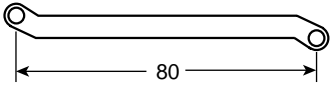
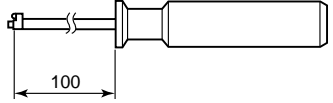
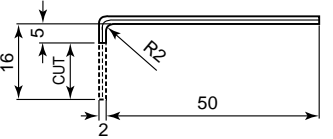
Convergence and Focus Adjustment for the Optical Mechanism

Color	Adjustment	Direction	Movement	Position	Adjusting tool	Lock screw	Tightening tool
R/B colors	Convergence	X direction	±0.8mm	Eccentric cam	Eccentric cam adjusting wrench	d	Hex wrench
		Y direction	±0.8mm	Eccentric cam	Eccentric cam adjusting wrench	d	Hex wrench
		θZ direction	±1°	Eccentric cam	Eccentric cam adjusting wrench	d	Hex wrench
	Focus	Z direction	±0.8mm	Notch and hole "a" & "c"	Eccentric screwdriver,	a, c	Phillips screwdriver, *Hex wrench
		θX direction	±1°	Notch and hole "a" & "c"		a, c	
		θY direction	±1°	Notch and hole "b" & "c"		b, c	
G color	Focus	Z direction	±0.2mm	Same as for R and B colors			
		θX direction	±1°				
		θY direction	±1°				

Focus Adjustments the Other Way

Lock screw	Position	Related direction
a	Notch and hole "a"	Z and θ X directions
b	Notch and hole "b"	θ Y direction
c	Notch and hole "c"	Z, θ X and θ Y directions

Convergence and Focus Adjusting and Tightening Tools

Tool	Specific or General	Tool code	Configuration
Eccentric cam adjusting wrench	Specific	9DASPN-XGNV1U	
Eccentric screwdriver	Specific	9EQDRIVER-NV1A	
Hex wrench	General (redesigned)	9EQLNC-XGNV1U	
Phillips screwdriver	General	—	For M2.6 pan-head machine screw
*Hex wrench	General	—	Preferably use a 70 mm or longer screwdriver (with a handle).

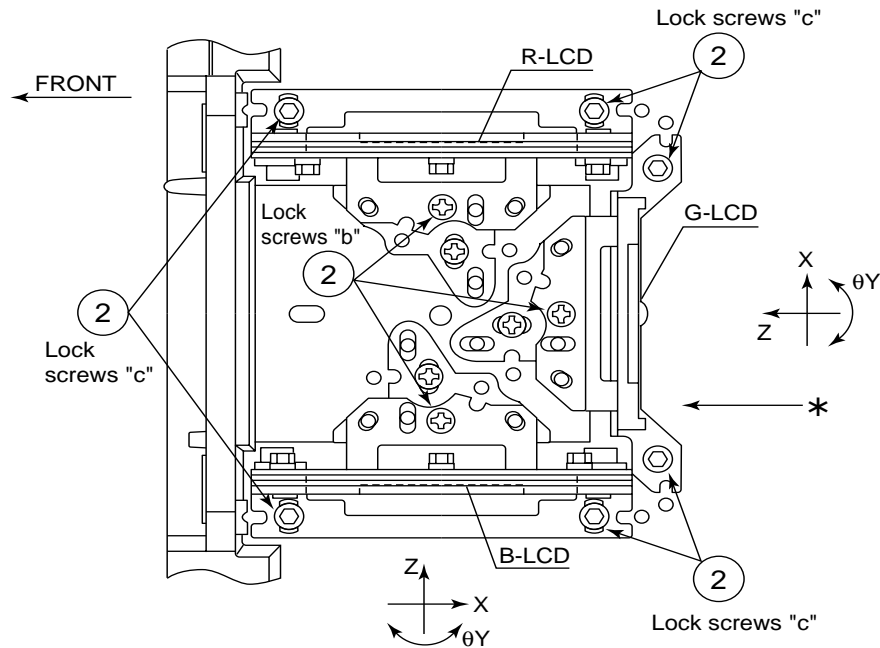
Replacing the G-LCD and B-LCD panels

With the top cabinet removed

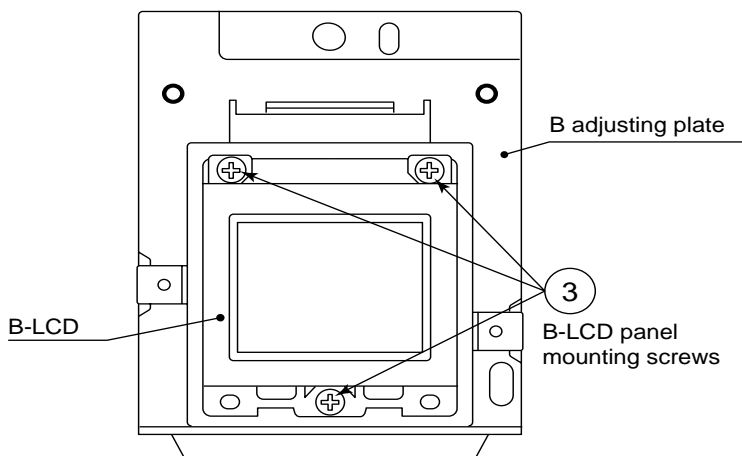
- (1) Disconnect the LCD flat cable from the output PWB connector.
- (2) Remove the lock screws "b" and "c". Detach the R/B adjusting plate or the G adjusting plate together with the LCD panel.
- (3) Separate the LCD panel from the adjusting plate.
- (4) Mount a new LCD panel in the reverse order of the above steps (1), (2) and (3).

* Readjust the convergence and focus. Note that the G LCD panel needs no convergence adjustment and has a small adjustment range in the Z direction.

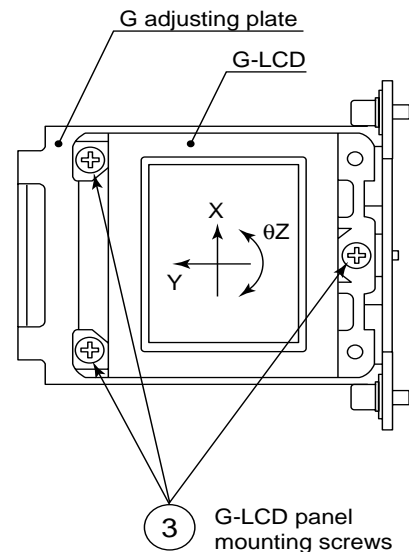
TOP VIEW



SIDE VIEW



SIDE VIEW



Replacing the R-LCD panel

(1) Disconnect the LCD flat cable from the output PWB connector.

<Figure 1>

(2) Remove the two screws "A".

(3) Lift and detach the plate "B" together with the incident light deflection plate.

<Figure 2>

(4) Remove the four screws "C" and separate the units D and E from each other.

(5) Take the R-LCD panel out of the adjusting plate.

(6) Place and fix a new R-LCD panel in the reverse steps.

(7) Adjust the deflection plate. (See page 26).

(8) Adjust the focus and convergence. (See page 21.)

* Readjust the convergence and focus. Note that the G LCD panel needs no convergence adjustment and has a small adjustment range in the Z direction.

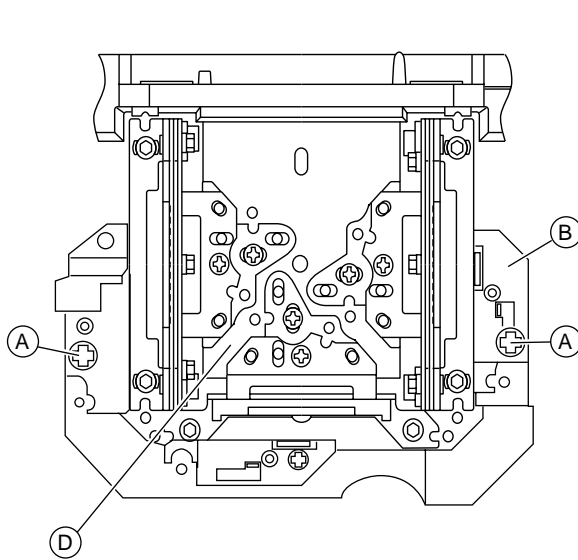


Fig.1

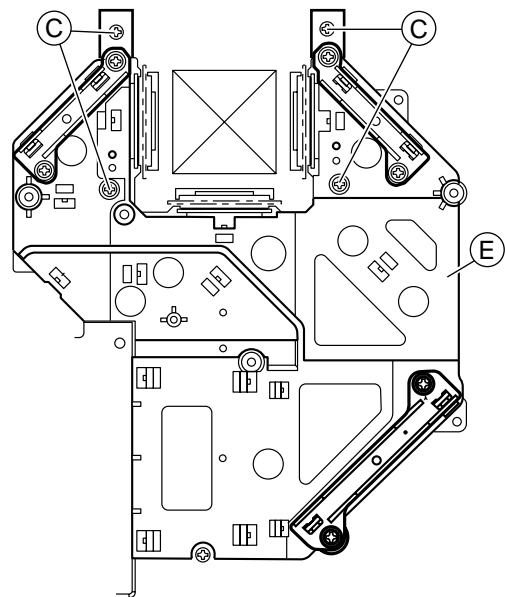
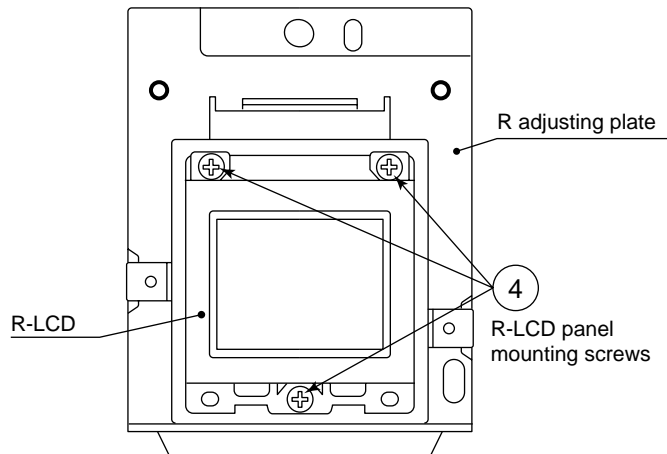


Fig.2

SIDE VIEW

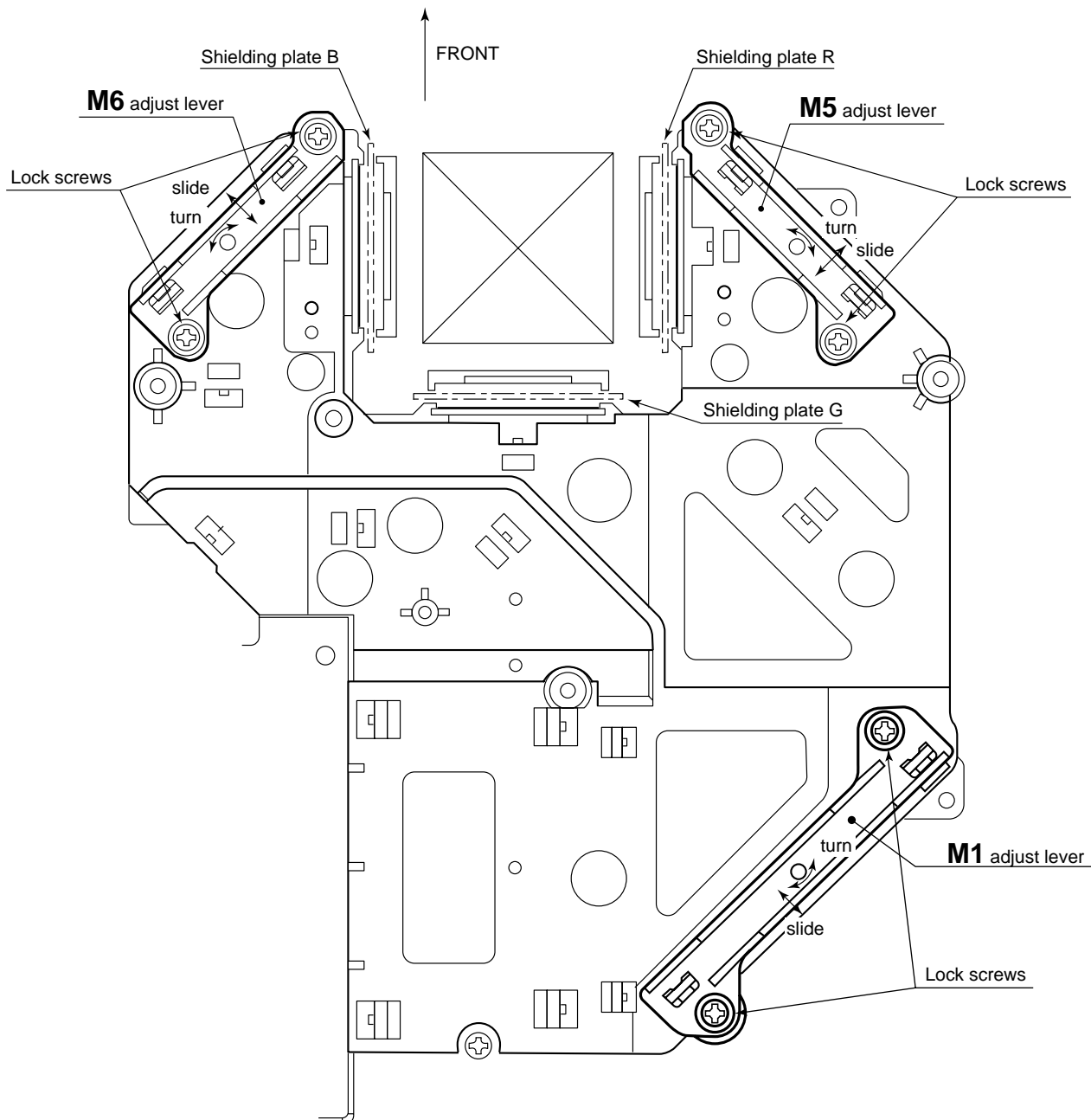


Adjusting the optical axis of the mirrors (M1, M5 and M6)

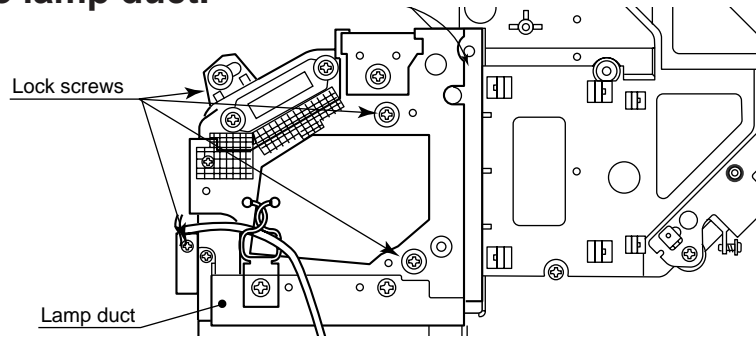
The optical axis must be readjusted if an eclipse happens with the R, G or B mirrors. Generally speaking, this adjustment is needed when any of the internal optical components has been replaced.

Adjustment procedure required when any of the panels has been replaced or the convergence has been adjusted

- (1) Disconnect the flat cables of all the LCD panels.
- (2) Let the lamp light up.
- (3) To adjust the G mirror, shield the R and B mirrors with shielding plates (You can use a business card or the like to block the light).
- (4) Loosen the lock screw of the M1 adjust lever.
- (5) Looking at the G image on the screen, turn or slide the M1 adjust lever until the eclipse on the screen disappears. Tighten up the screw.
- (6) To adjust the R mirror, shield the G and B mirrors and adjust the M5 adjust lever. For the B mirror, shield the R and G mirrors and adjust the M6 adjust lever. (Take the same steps 4 and 5 above.)
- (7) Remove all the shielding plates to have a white image. Make sure there is no eclipse.



Adjusting the lamp duct.

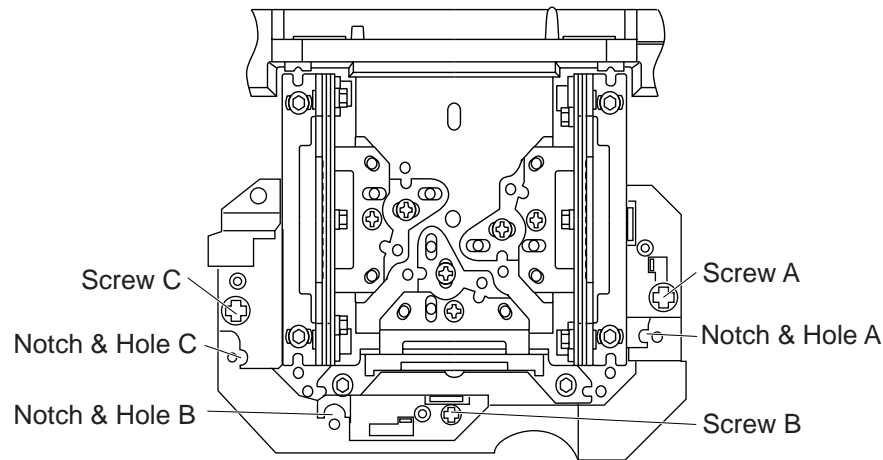


Adjustment procedure required when the lamp has been replaced and you can see ununiformity. (Case of Right and Left have ununiformity on the screen)

- (1) Let the lamp light up.
- (2) Receive the white pattern signal at 100%.
- (3) Loosen the four lock screws from the lamp duct.
- (4) Looking at the white image on the screen, turn the lamp duct until the uniformity comes to best point on the screen.
- (5) Tighten the lock screws of the lamp duct. (Tighten torque is $10 \pm 2 \text{ kg} \cdot \text{cm}$)

Adjustment of incident polarizing plate.

Carry it out when removing polarizing plate.



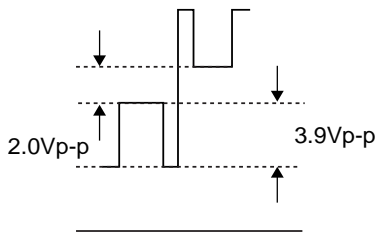
(From the condition that the top cabinet opens.)

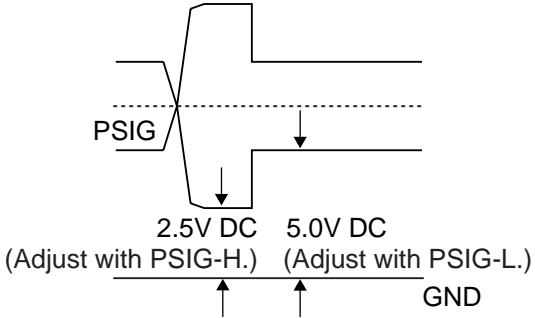
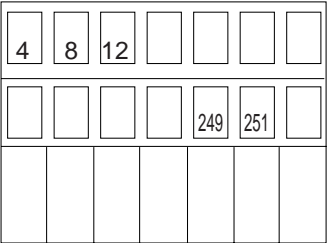
1. Remove screws, earth plate from the output PWB.
 2. Extend each FFC cable of R, G, B (Using QCNW-4852CEZZ) and try so that it can move a PWB so that it can see the part which adjusts polarizing plate from the top.
 3. Turn on the power, and indicate a black screen on the screen.
- <Adjusting the G-LCD incident polarizing plate.>
4. Move an output PWB so that you can see screw B and notch & hole B.
 5. Put an eccentric screwdriver (9EQDRIVER-NV1A) in notch & hole B, and loosen screw B.
(Loosen it too much, and be careful that the screw doesn't come off.)
 6. Adjust with the eccentric screwdriver in the place where a brightness is the lowest, and tighten screw B, and fix it with seeing a black screen.
- Adjust it with screw A and notch & hole A when adjusting incident polarizing plate of R-LCD.
Adjust it with screw C and notch & hole C when adjusting incident polarizing plate of B-LCD.
- ※ Adjust it in the turn of Green, Red, Blue with 3 place of RGB as well when adjusting it.
※ Be careful not to make it short-circuit when moving an output PWB.

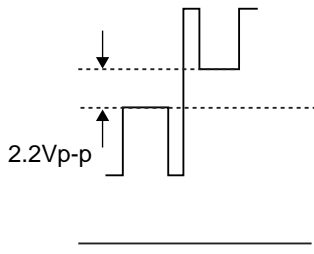
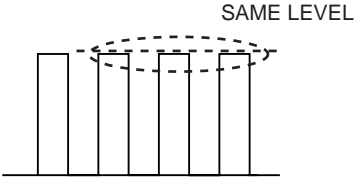
Color	adjustment	Adjustment direction	Amount of adjustment.	Adjustment place form	Ajdustment jig	Fixing screw	Fixed screw tool.
Red	polarizing plate adjustment	θ direction	$\pm 1^\circ$	Notch & Hole A	eccentric screwdriver	A	Phillips screwdriver
Green	polarizing plate adjustment	θ direction	$\pm 1^\circ$	Notch & Hole B	eccentric screwdriver	B	Phillips screwdriver
Blue	polarizing plate adjustment	θ direction	$\pm 1^\circ$	Notch & Hole C	eccentric screwdriver	C	Phillips screwdriver

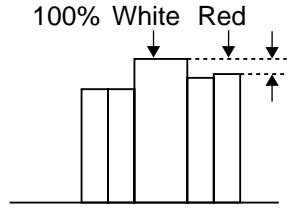
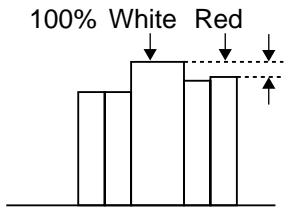
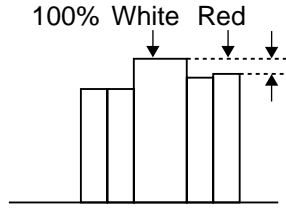
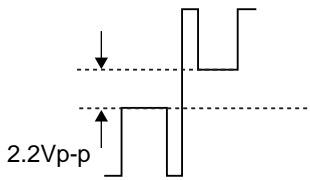
ELECTRICAL ADJUSTMENT

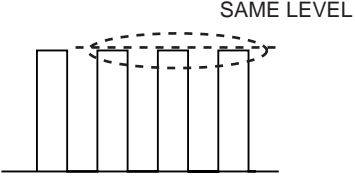
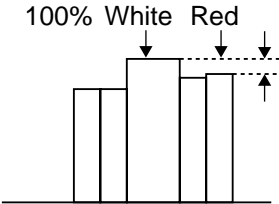
Hook up a signal generator, or a DOSV or Mac personal computer to the projector in order to feed the signals specified in the Adjusting conditions.

No.	Adjusting point	Adjusting conditions	Adjusting procedure
1	EEPROM initialization	1. Turn on the power (make sure the lamp lights up) and warm up the unit for 15 minutes.	<ul style="list-style-type: none"> Make the following settings: Press S2601 to call up the process mode and execute S2 and S4 in the SSS menu. Now the system, with the PC board not included, is initialized. Do not execute S1 because otherwise the PC board will be initialized. To adjust the PC board, follow the instruction in "Adjusting the PC Interface". (See page 34)
2	R drive	1. Make the following choice. Group : A/D 2. Feed the 100% red-only signal. Make the following choice. Group : A/D Subject : R-D	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the data so that the signal becomes bit-less (noise).
3	B drive	1. Feed the 100% blue-only signal. Make the following choice. Group : A/D Subject : B-D	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the data so that the signal becomes bit-less (noise).
4	G drive	1. Feed the 100% green-only signal. Make the following choice. Group : A/D Subject : G-D	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the data so that the signal becomes bit-less (noise).
5	RGB 1 system black level signal amplitude (odd-numbered)	1. Make the following choice: Group : OUTPUT 1 Subject : G1-BLK G1-GAIN For green, choose the subjects R1-BLK and R1-GAIN. For blue, choose the subjects B1-BLK and B1-GAIN. 2. Connect the oscilloscope to TP1101 for red. TP1201 for green TP1301 for blue	<ul style="list-style-type: none"> Choose the subject G1-GAIN and adjust the signal amplitude to 3.9 ± 0.05 Vp-p using the control switches or the remote controller buttons. Next, choose the subject G-BLK and adjust the white peak level to $2.0\text{Vp-p} \pm 0.1\text{V}$.  <ul style="list-style-type: none"> Make the same adjustments for green and blue.

No.	Adjusting point	Adjusting conditions	Adjusting procedure
6	P SIGNAL	<ol style="list-style-type: none"> 1. Connect the oscilloscope to TP1102 for red. 2. Make the following choice: Group : OUTPUT 2 Subject : PSIG-H : PSIG-L 	<ul style="list-style-type: none"> Adjust the PSIG waveform to the one shown below.  <ul style="list-style-type: none"> For the green and blue colors, make sure their waveforms are similar to that of the red color.
7	Sample-and-hold pulse phase RCK-PHASE GCK-PHASE BCK-PHASE	<ol style="list-style-type: none"> 1. Feed the XGA mode 75-Hz black signal. 2. Make the following choice: Group : OUTPUT 3 Subject : SH-PHASE (Have the standard level at 8.) Fix the GCK-PHASE settings all to 8. 	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, make sure that the "OUTPUT 3" characters are not blurry and there is no ghost image. If such blur or ghost occurs, finely adjust the setting in the range of 7~9.
8	RGB counter-voltage adjustment	<ol style="list-style-type: none"> 1. Feed the black-and-red (25%) stripe signal (XGA). 2. Make the following choice: Group : OUTPUT 3 Subject : RC (R) : BC (B) : GC (G) 	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the data in order to minimize the flicker. Make the same adjustment for BC (B) and GC (G). See if the image is equally adjusted at the center and both sides of the screen. If not, readjust the setting to have the image equal at right and left.
9	RGB gradation regeneration adjustment	<ol style="list-style-type: none"> 1. Feed the INFO COM. gray scale and color bar pattern. 2. Make the following choice: Group : OUTPUT 1 Subject : G1-BLK 	<ul style="list-style-type: none"> Make sure that scale (white side) to No.251 and scale (black side) to No.8 can be seen. If white scale can't be seen properly, readjust with G1-BLK. 

No.	Adjusting point	Adjusting conditions	Adjusting procedure
10	RGB white balance	1. Feed the 32-step gray scale signal (XGA 60Hz). Group : OUTPUT 1 Subject : R1-BLK (R) R1-GAIN(R) B1-BLK (B) B1-GAIN(B)	<ul style="list-style-type: none"> Adjust the R1-BLK and B1-BLK data for the black balance on the gray scale. Then adjust the R1-GAIN and B1-GAIN data for the center-to-white balance on the gray scale. (Adjust to the best point.)
11	Horizontal center	1. Feed the NTSC mono-scope pattern signal. 2. Group : VIDEO 1 Subject : NTSC-H	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the data to have the same overscan.
12	Video brightness adjustment	1. Feed the baseband (0 step gray scale :0% Black to 100% White) signal. Group : VIDEO 1 Subject : BRIGHT 2. Press the control switch or the remote control's mute button (to set the gamma correction to the process setting).	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the setting until the black signal (0%) becomes bit-less.
13	Video picture adjustment	1. Feed the split color bar signal. Group : VIDEO 1 Subject : PICTURE 2. Connect the oscilloscope between pin TP1201 and GND.	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the white to white (100%) level difference to 2.2 ± 0.05 Vp-p. 
14	Tint	1. Feed the split color bar signal. Group : VIDEO 1 Subject : TINT 2. Connect the oscilloscope to TP1301.	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons. Adjust the setting so that the points indicated in the waveform figure are at the same level. 

No.	Adjusting point	Adjusting conditions	Adjusting procedure
15	NTSC color saturation level	<ol style="list-style-type: none"> Feed the split color bar signal. Group : VIDEO 1 Subject : N-COLOR Connect the oscilloscope to TP1101. 	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the difference between the 100% white portion and the red portion to 0.25 ± 0.02 Vp-p. (same as 100% white) 
16	PAL color saturation level	<ol style="list-style-type: none"> Feed the PAL color bar signal. Group : VIDEO 1 Subject : P-COLOR Connect the oscilloscope to TP1101. 	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the difference between the 100% white portion and the red portion to 0.3 ± 0.02 Vp-p. 
17	SECAM color saturation level	<ol style="list-style-type: none"> Feed the SECAM color bar signal. Group : VIDEO 1 Subject : S-COLOR Connect the oscilloscope to TP1101. 	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the data to have a level difference of 0.3 ± 0.02 Vp-p between the 100% white portion and the red portion. 
18	Video white balance	<ol style="list-style-type: none"> Feed the NTSC monoscope pattern signal Group : VIDEO 2 Subject : R1-BLK B1-BLK 	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust so that the entire screen looks evenly colorless.
19	DVD Contrast	<ol style="list-style-type: none"> Feed the color bar signal of the 480I component signal to the BNC G(Y) input terminal. Select the following subject. Group : DVD Subject : CONTRAST 	<ul style="list-style-type: none"> Using the control switches or the remote controller buttons, adjust the white to white (100%) level difference to 2.2 ± 0.05 v p-p. 

No.	Adjusting point	Adjusting conditions	Adjusting procedure
20	DVD Brightness	<ol style="list-style-type: none"> 1. Feed the color bar signal of the 480I component signal to the BNC G(Y) input terminal. 2. Select the following subject. Group : DVD Subject : CONTRAST 	<ul style="list-style-type: none"> • Using the control switches or the remote controller buttons, adjust the setting until the black signal(0%) becomes bit-less.
21	DVD Tint	<ol style="list-style-type: none"> 1. Feed the color bar signal of the 480I component signal to the BNC Y, Pb and Pr input terminals. Feed the sync signal only for the Y signal. 2. Select the following subject. Group : DVD Subject : TINT 3. Connect the oscilloscope to TP1301. 	<ul style="list-style-type: none"> • Using the control switches or the remote controller buttons. Adjust the setting so that the points indicated in the waveform figure are at the same level. 
22	DVD Color	<ol style="list-style-type: none"> 1. Feed the color bar signal of the 480I component signal to the BNC G(Y) input terminal. 2. Select the following subject. Group : DVD Subject : COLOR 3. Connect the oscilloscope to TP1101. 	<ul style="list-style-type: none"> • Adjust the level difference between the 100% white and red portions to 0.3 ± 0.02 Vp-p. 
23	DVD White balance adjustment	<ol style="list-style-type: none"> 1. Feed the NTSC monoscope signal to G(Y) input terminal of the BNC terminal. 2. Select the following subject. Group : DVD Subject : R1-BLK B1-BLK 	<ul style="list-style-type: none"> • Adjust so that a white balance may become the best condition by using the control switch or buttons of the R/C.
24	Checking and readjustment of white balance	<ol style="list-style-type: none"> 1. The adjustment condition of each item is as mentioned in the following. RGB input: Refer to No.11 VIDEO input: Refer to No.19 DVD input: Refer to No.23 	<ul style="list-style-type: none"> • Make sure that a white balance is the best condition.

No.	Adjusting point	Adjusting conditions	Adjusting procedure						
25	Color system performance check	1. Receive the color bar signal.	<ul style="list-style-type: none">● In the process mode and select L1. Check the color and tint.						
26	Video system performance check	1. Receive the monoscope pattern signal.	<ul style="list-style-type: none">● In the process mode and select L2. Check the picture, brightness and sharpness.						
27	Audio system performance check		<ul style="list-style-type: none">● In the process mode nad select L3. Check the bass, treble and balance.						
28	RGB performance check	1. Receive the RGB signal.	<ul style="list-style-type: none">● In the process mode and select L4. Check the picture, brightness, red, blue, clock, phase, horizontal position, and vertical position.						
29	Off-timer performance check		<ul style="list-style-type: none">● In the process mode and select OFF. Make sure that the off-timer starts with “5” (minutes), counts down each minute in 1 second, and turns off the set at “0”.						
30	Thermistor performance check	1. Heat the thermistor using a dryer.	<ul style="list-style-type: none">● Make sure the “TEMP” is displayed.						
31	Automatic synchronization	1. Receive the PHASE check pattern signal.	<ul style="list-style-type: none">● Call the VGA/S-VGA/XGA mode and make sure that the clock, phase, horizontal and vertical positions can be automatically adjusted.						
32	Keystone correction performance check		<ul style="list-style-type: none">● Make sure the keystone correction functions well.						
33	Factory settings		<ul style="list-style-type: none">● Make the following settings.<table><tr><td>Process adjustment</td><td>Remote controller setting</td></tr><tr><td>S4</td><td>"Factory setting 4" for XU</td></tr><tr><td>S3</td><td>"Factory setting 3" for XE/XD</td></tr></table>	Process adjustment	Remote controller setting	S4	"Factory setting 4" for XU	S3	"Factory setting 3" for XE/XD
Process adjustment	Remote controller setting								
S4	"Factory setting 4" for XU								
S3	"Factory setting 3" for XE/XD								

ADJUSTING THE PC INTERFACE (CPCi-0054CE01/02. PC I/F Unit)

1.The initialization of the set.

- 1) Press the S2601 switch to go to the process mode.
- 2) Perform S1 of the SSS menu. (S1 initializes only a PC I/F board. Don't perform S2 because adjustment data except for the PC board are initialized.
- 3) Make sure that version of the SPECIAL program (VER.XXX) of the menu is the latest.

2.Adjusting the level.

2-1. Setting the oscilloscope

Set the range to DC 1 V/div and 5 μ /div.

2-2. Connecting the PC Interface

- 1) Connect the cable between the ANALOG OUTPUT (PC computer) and the DSUB connector (INPUT1 of the projector).
- 2) Set the PC computer in the XGA mode (1024 x 768, 60 Hz, 32-step scale). Adjust the output amplitude to 700 mVp-p (terminated with 75 ohms) for the black-to-white portions.
- 3) Turn on the power.

2-3. Adjusting and checking the level

- 1) Press the S2601 switch to go to the process mode.
- 2) Set the SH-PHASE on the OUTPUT3 menu to 8. (Make the characters on screen clear and crisp.)
- 3) Adjust black level of red signal with R-BRIGHT of the A/D in a place to become bit less condition.
- 4) Adjust black level of blue signal with B-BRIGHT of the A/D in a place to become bit less condition.
- 5) Adjust black level of green signal with G-BRIGHT of the A/D in a place to become bit less condition.

2-4. Adjusting the DTV

- 1) Set the switch to the BNC input terminal of INPUT1
- 2) Set up a signal generator in 1080i 60Hz mode white signal. Output amplitude makes space between black - white 700mVp-p (75ohm terminated) .
- 3) Connect the analog output terminal of the signal generator and BNC connector (the INPUT1 terminal of projector) with the cable.
- 4) Make G-BRIGHT of DTV the numerical value which is the same as G-BRIGHT of A/D.
- 5) Set up the level of the signal output in 53%, and adjust with CB-OFFSET of the DTV in a place to become bit less condition.
- 6) Set up the level of the signal output in 53%, and adjust with CR-OFFSET of the DTV in a place to become bit less condition.
- 7) After adjusting the CB-OFFSET and CR-OFFSET, 6 point adds G-BRIGHT.
- 8) Press the S2601, to comes out of the process mode.

Servicing precautions

- (1) If the convergence gets out of spec in servicing the set, call the process mode and select the following group and subjects.

Group: NOKO

Subject: R-CNV-H, R-CNV-V

G-CNV-H, G-CNV-V

B-CNV-H, B-CNV-V

(H and V are for horizontal and vertical adjustments, respectively.)

Adjust the above settings to the range of 0 to 4.

- (2) When entering the process mode, select the following group and subjects too.

Group: VIDEO1

Subject: SET-UP B

SET-UP C

Make sure the SET-UP B and SET-UP C settings are 10 and 2, respectively. To exit from the process mode, be sure to take either of the following ways: Go to the subject SET-UP 1 and quit the mode, or select Group: SSS and Subject: S4 and quit the mode.

ADJUSTMENT PROCESS MENU LIST

P20X()
A/D
OUTPUT1
OUTPUT2
DTV
OUTPUT3
VIDEO1
VIDEO2
DVD
NOKO
LINE
SSS
PATTERN
CVIC
LENS
SPECIAL



Each menu list

A/D
R-BRIGHT 45
G-BRIGHT 45
B-BRIGHT 45
R-D 83
B-D 83
G-D 83

OUTPUT1
R1-BLK 92
R1-GAIN 143
G1-BLK 90
G1-GAIN 145
B1-BLK 90
B1-GAIN 145

OUTPUT2
PSIG-H 80
PSIG-L 170
R2-BLK 128
G2-BLK 128
B2-BLK 128

DTV
G-BRIGHT 45
CB-OFFSET 16
CR-OFFSET 16

OUTPUT3
RC 127
GC 125
BC 131
SH-PHASE 8
GCK-PHASE 8

VIDEO
NTSC-H 2
PICTURE 45
BRIGHT 128
TINT 130
N-COLOR 108
P-COLOR 107
S-COLOR 110
SET UP 0
SET UP 10
SET UP 1

VIDEO2
R1-BLK 90
B1-BLK 90
PEAK FIL 2
PEAK GAIN 3
N358 DLY 4
PAL DLY 5
SECAM DLY 0

DVD
CONTRAST 22
BRIGHT 196
TINT 32
COLOR 21
R1-BLK 90
B1-BLK 90

NOKO
NOKO-LH OFF
NOKO-RL OFF
CC 00
R-CNV-H 2
G-CNV-H 2
B-CNV-H 2
R-CNV-V 2
G-CNV-V 2
B-CNV-V 2

LINE
L1
L2
L3
L4
OFF
TEMP OFF
SENER CHECK
ID CHECK

SSS
TIME
S1
S2
S3
S4
S5
LAMP

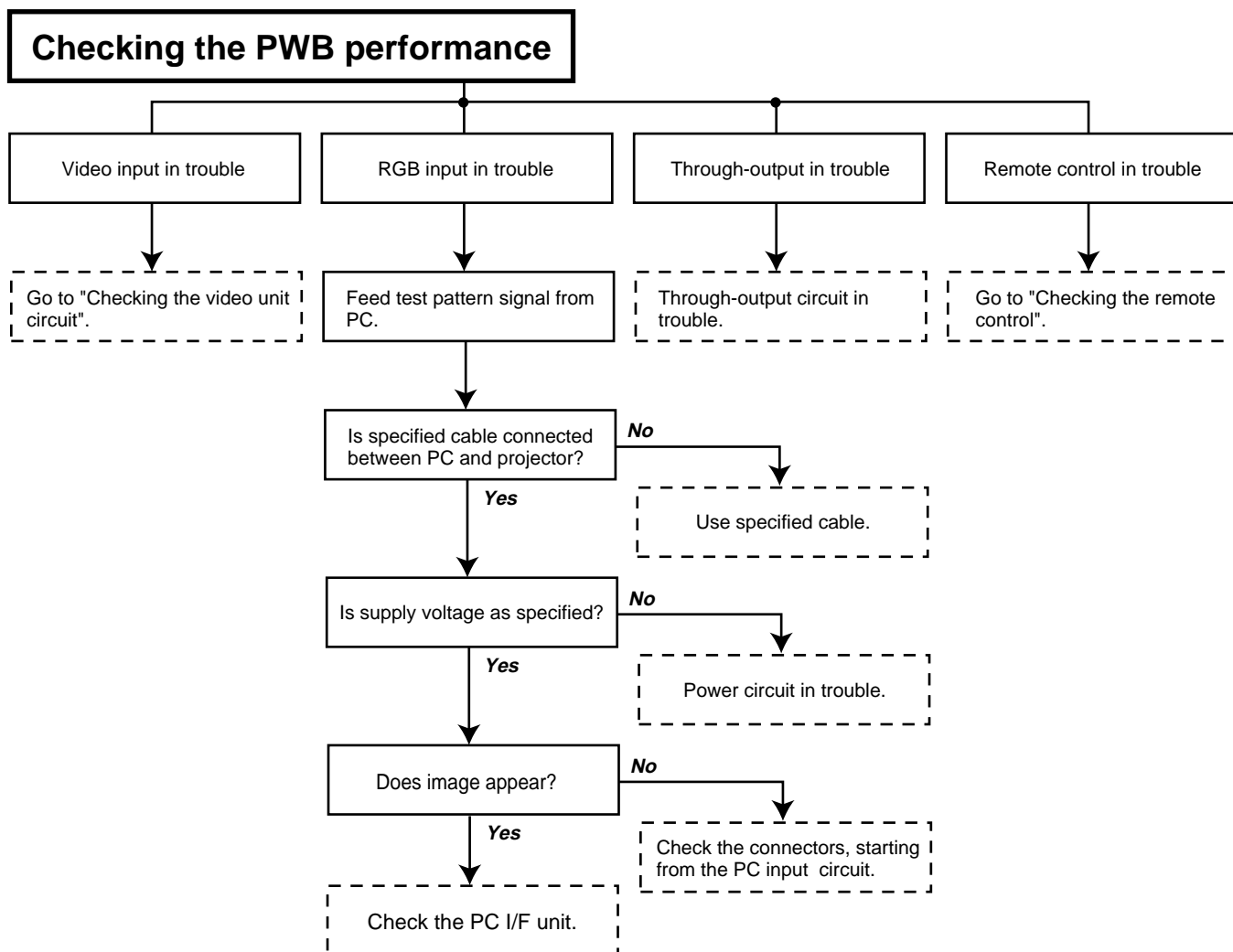
PATTERN
RGB 1
RGB(50) 2
CROSS 1
STEP
COLOR
CHR 1

CVIC
PROGRESSIVE
ENHANCE-VIDE
ENHANCE-HDTV
ENHANCE-RGB
SCREEN
IDC

LENS
LENS AUTO
LENS TOP
LENS BOTTOM

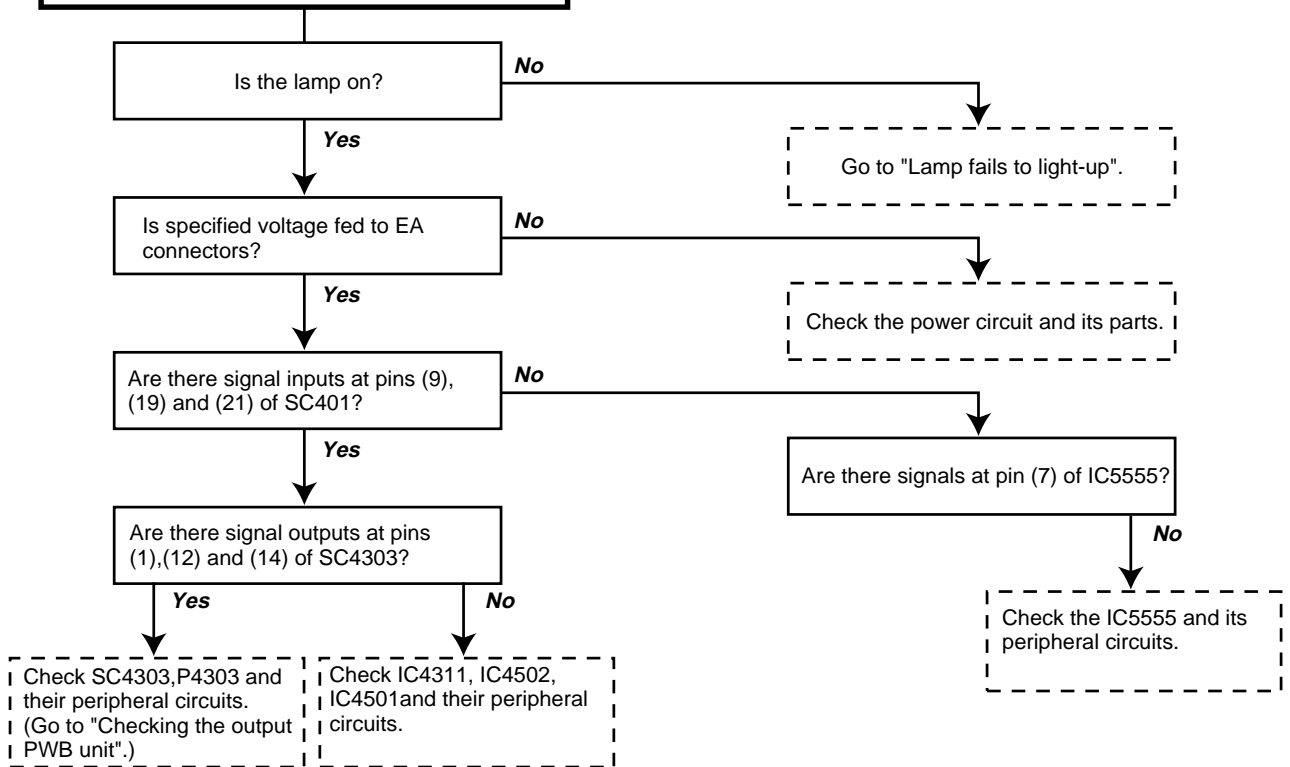
SPECIAL
IPL
E2PROM
ADR RD/WR
PRG VER.0223
OSD VER.0215
SUB VER.S0201b
CVIC VER.0216

TROUBLE SHOOTING TABLE

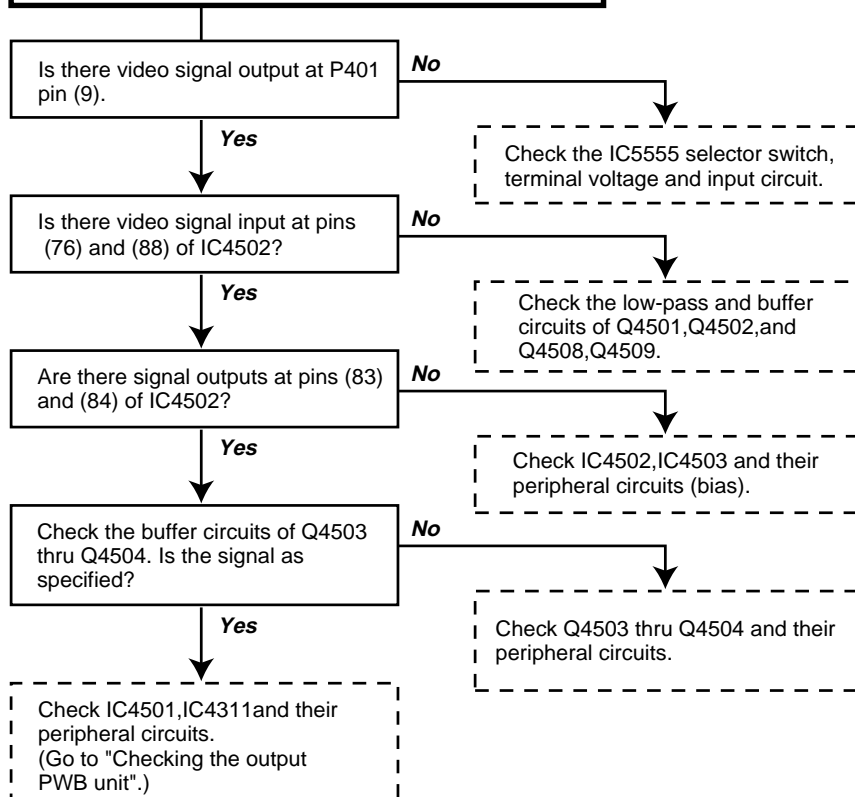


TROUBLE SHOOTING TABLE (Continued)

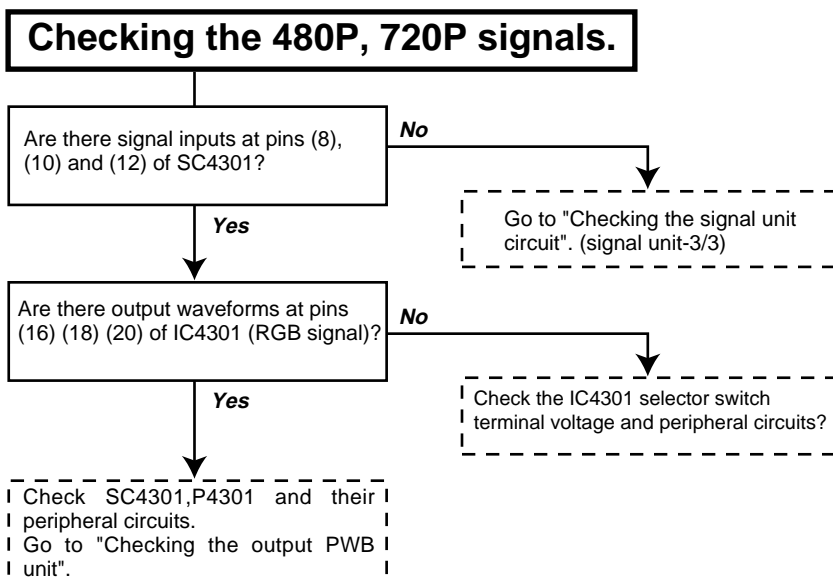
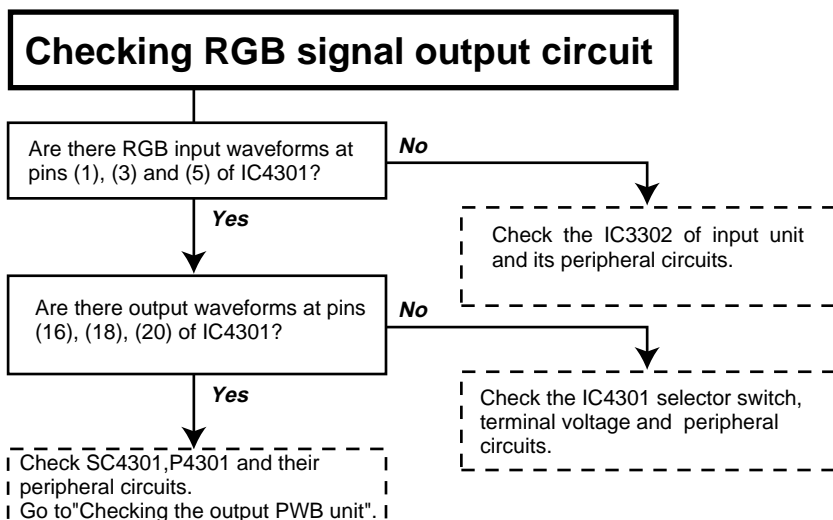
Checking the video system



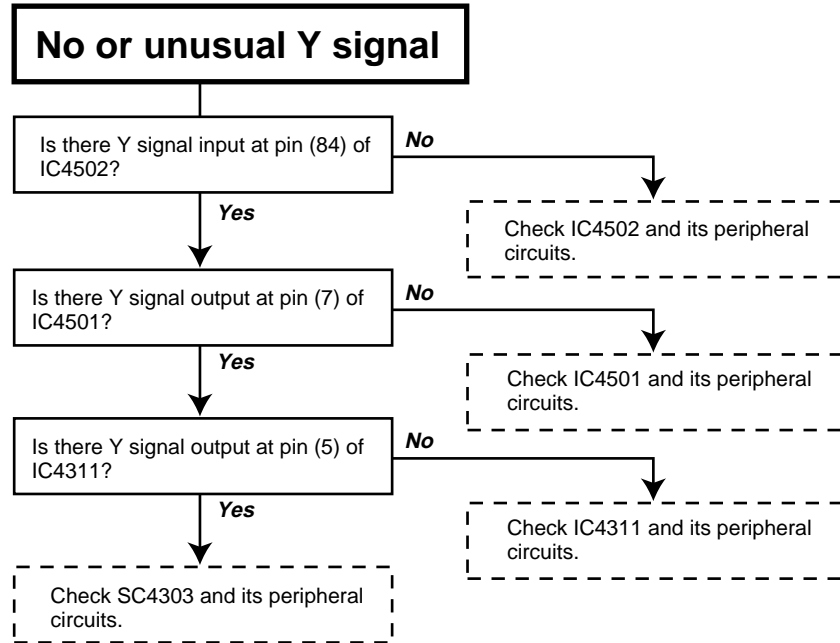
Checking the video unit circuit



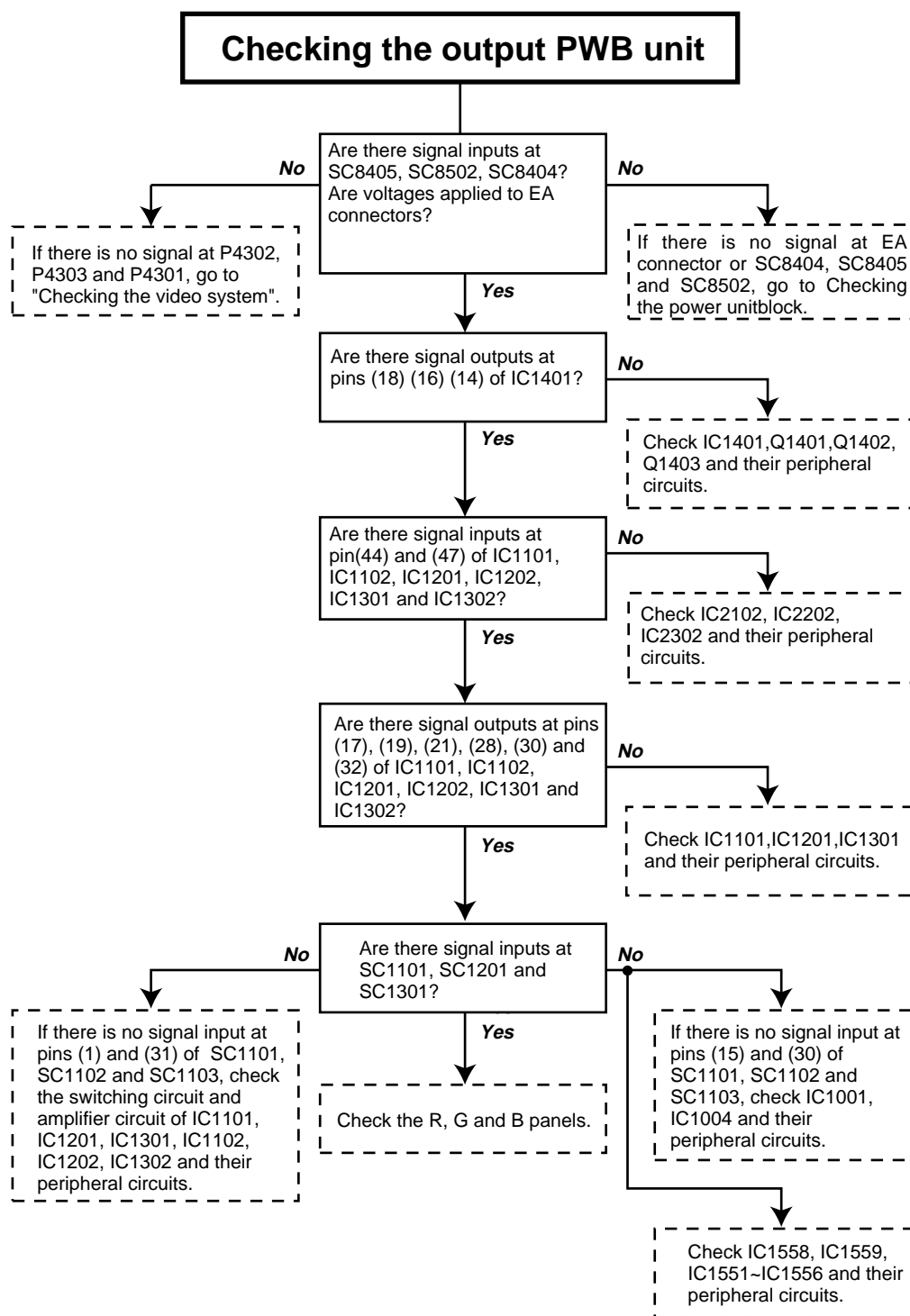
TROUBLE SHOOTING TABLE (Continued)



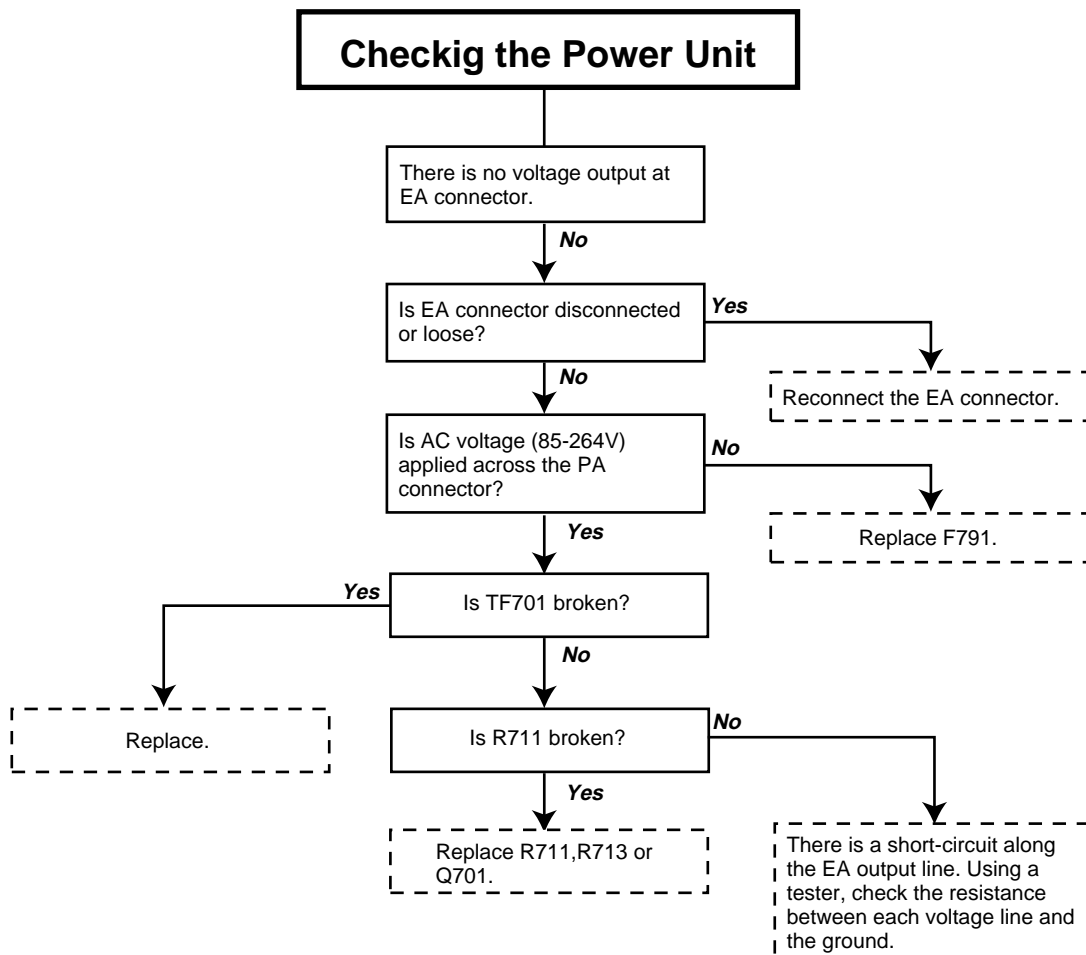
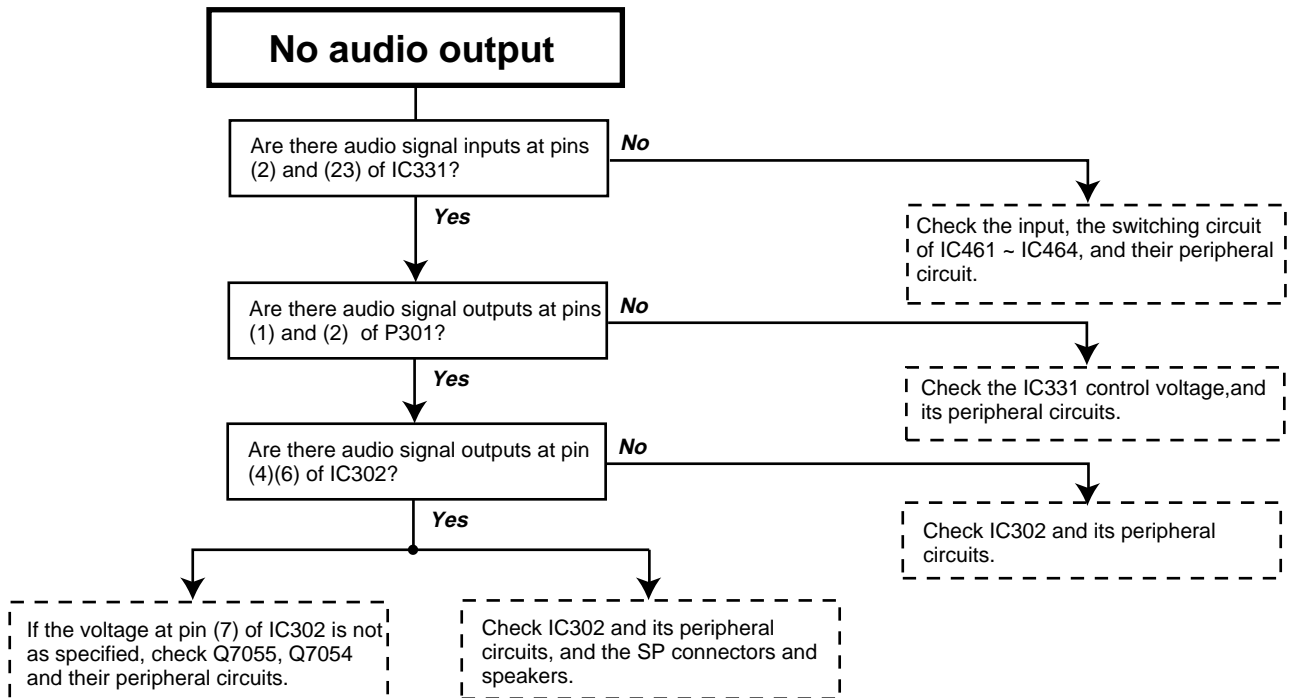
TROUBLE SHOOTING TABLE (Continued)



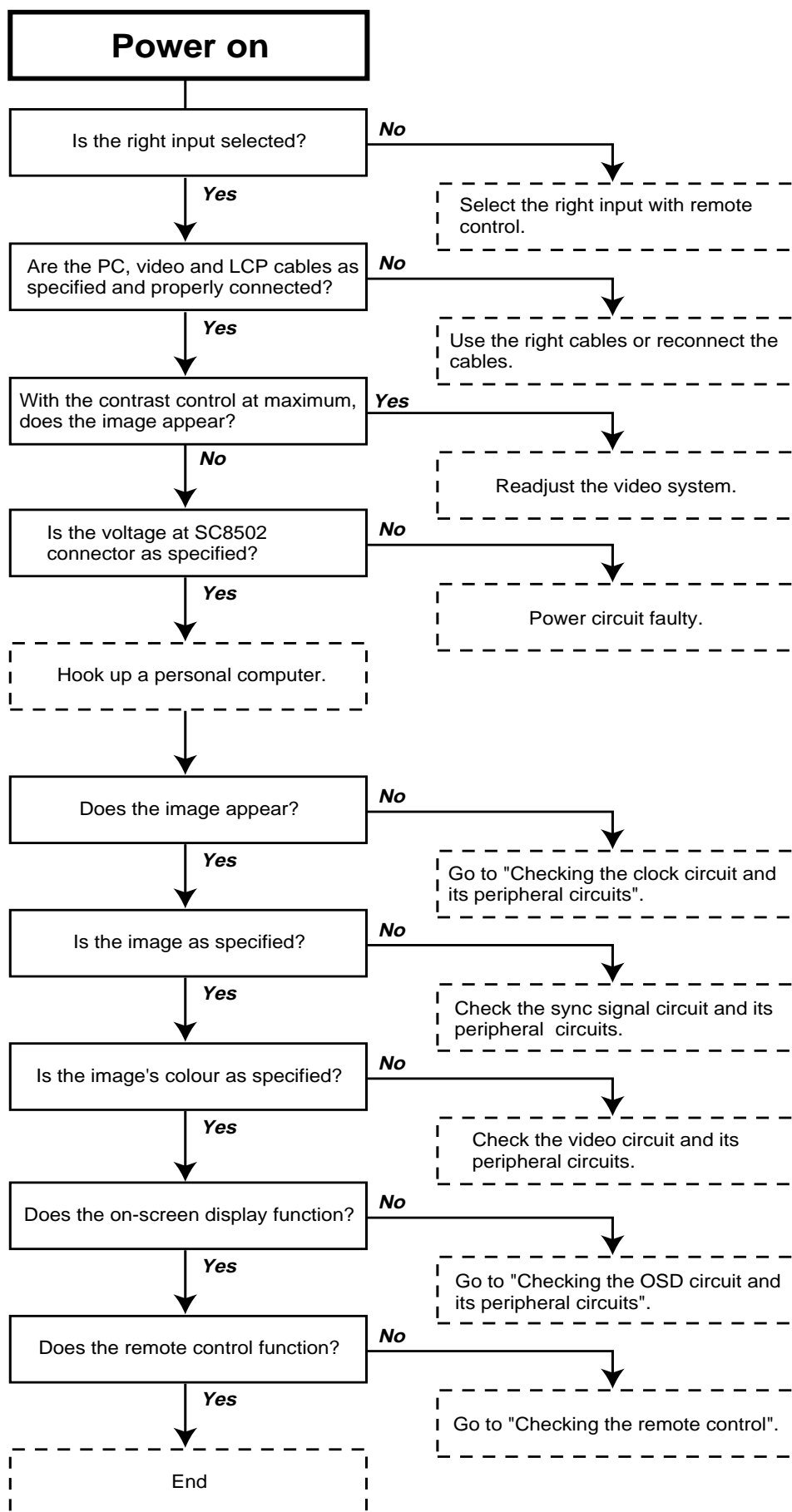
TROUBLE SHOOTING TABLE (Continued)



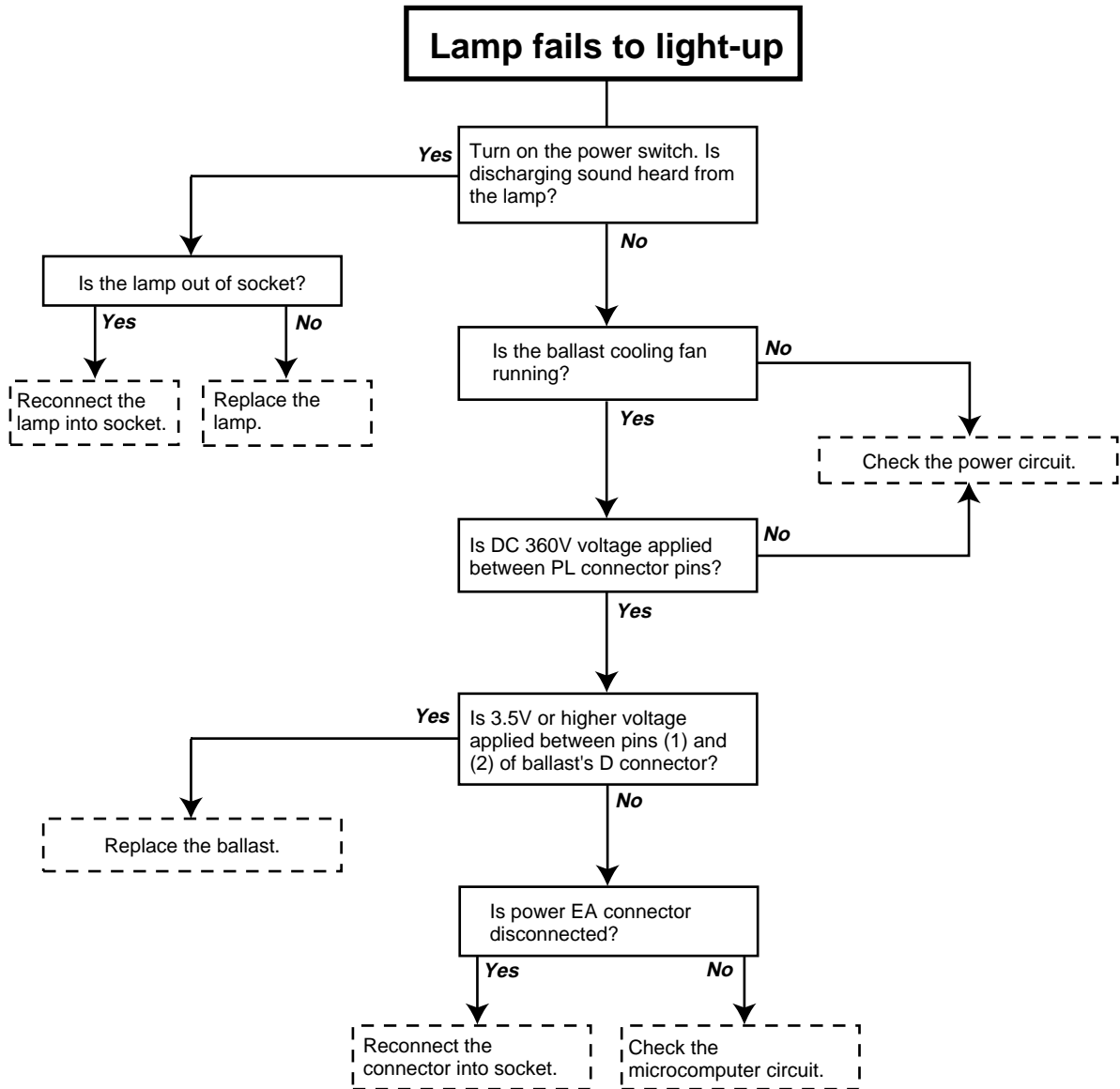
TROUBLE SHOOTING TABLE (Continued)



TROUBLE SHOOTING TABLE (Continued)



TROUBLE SHOOTING TABLE (Continued)



Technische Daten

Produkttyp	LCD Projektor
Modell	XG-P20XU/XE/XD
Videosystem	PAL/PAL 60/PAL-M/PAL-N/SECAM/NTSC 3.58/NTSC 4.43 DTV 480P/720P/1080i
Wiedergabeverfahren	LCD-Projektionspaneel×3,optisches RGB-Verschlußverfahren
LCD-Projektionspaneel	Panelgröße:33 mm (1,3") (20,0 mm [H]×26,6 mm [B]) Wiedergabe-Verfahren:Durchlässiges TN-Flüssigkristall-Paneel Treiberverfahren:TFT (Dünnschichttransistor)Aktivmatrix-Paneel Anzahl der Bildpunkte:786.432 Bildpunkte (1.024 [H]×768 [V])
Standard-Objektiv	1–1,3 Zoomobjektiv,F1,7–2,3,f =49,1–63,8 mm
Projektionslampe	220 W Wechselstromlampe
Kontrastverhältnis	600:1
Videoeingangssignal	RCA-Stecker (INPUT 4):VIDEO,Gemischtes Video,1,0 Vs-s,negatives Sync.-Signal,75Ω terminiert
S-Videoeingangssignal	RCA-Stecker:AUDIO,0,5 Vrms mehr als 22 kΩ(Stereo) 4-Pin Mini DIN-Stecker (INPUT 5) Y (Luminanz-Signal):1,0 Vs-s,negatives Sync.-Signal,75Ω terminiert C (Chrominanz-Signal):Stoß 0,286 Vs-s,75Ω terminiert
Komponenten-Eingangssignal	BNC-Stecker (INPUT 2) Y:1,0 Vs-s,negatives Sync.-Signal,75Ω terminiert PB:0,7 Vs-s,75Ω terminiert PR:0,7 Vs-s,75Ω terminiert
Horizontale Auflösung	520 Fernsehzeilen (S-Videoeingang),750 Fernsehzeilen (DTV 720P-Eingang,STRECKENmodus)
RGB-Eingangssignal	15-PIN MINI D-SUB STECKANSCHLUSS (INPUT 1),5 BNC-STECKER (INPUT 2): RGB getrennt/gemischte Sync./Sync.auf Grün-Typ analoger Eingang:0 –0,7 Vs-s, positiv,75 Ω terminiert DVI-STECKANSCHLUSS (29-PIN),(EINGANG 3),RGB (DIGITAL),250 –1.000 mV,50Ω HORIZONTALES SYNC.-SIGNAL:TTL-Pegelsignal (positiv/negativ)oder gemischtes Sync.-Signal (nur Macintosh) VERTIKALES SYNC.-SIGNAL:Wie oben STEREO-MINIBUCHSE:AUDIO,0,5 Vrms,mehr als 22 kΩ (Stereo)
Punktetakt	12 –230 MHz
Vertikale Frequenz	43 –200 Hz
Horizontale Frequenz	15 –126 kHz
Computereingangs-Signal	9-Pin D-Sub-Steckanschluß (RS-232C-Eingangs-Port/Ausgangs-Port)
Lautsprechersystem	4,5 cm (1 7/8")rund×2 2 W+2 W (Stereo)
Nennspannung	100 –240 V Wechselstromspannung
Eingangsspannung	3,95 A
Nennfrequenz	50/60 Hz
Nennaufnahme	330 W
Stromverlust	<1.250 BTU/Stunde
Betriebstemperatur	+5 °C bis +40 °C
Lagertemperatur	-20 °C bis +60 °C
Gehäuse	Kunststoff
GyroRemote-Fernbedienung	Radiofrequenzbereich:40,667 –40,695 MHz
Abmessungen (ca.)	319,0×155,0×423,0 mm (B×H×T)(nur Hauptgerät) 322,5×188,5×438,0 mm (B×H×T)(einschließlich Standard-Objektiv,Drehfüße und vorstehende Teile)
Gewicht (ca.)	9,5 kg
Mitgeliefertes Zubehör	GyroRemote-Fernbedienung,Vier Batterien der Größe AAA,Netzkabel (1,8 m),RGB-Kabel (3 m),USB-Maus-Steuerungskabel (1 m),Computer-Audiokabel (3 m),ø 2,5 –ø 3,5 mm Fernbedienungskabel (15 cm),Drei BNC/RCA-Adapter,Ersatz-Luftfilter,Objektivkappe, CD-ROM,Bedienungsanleitung für LCD-Projektor,Kurzanleitungen für LCD-Projektor, Anleitung für die Sharp Advanced Presentation Software,Aufkleber für ID-Nummer
Ersatzteile	Standard-Objektiv (CLNS-0236CE01),Lampensatz (Lampe/Käfigmodul)(BQC-XGP20X//1), GyroRemote-Fernbedienung (RRMCG1631CESA für XG-P20XU, RRMCG1653CESA für XG-P20XE, CRMCG1654DE02 für XG-P20XD),Batterien der Größe AAA,Netzkabel, (QACCU 5013CEZZ, QACCL3022CEZZ, QACCV4002CEZZ, QACCB5024CENA),RGB-Kabel (QCNW-5304 CEZZ),USB-Maus-Steuerungskabel (QCNW-5916CEZZ),Computer-Audiokabel (QCNW-4870 CEZZ),ø 2,5 –ø 3,5 mm Fernbedienungskabel (QCNW-5943CEZZ),BNC/RCA-Adapter (QPLGJ0107GEZZ),Luftfilter (PFILD0080CEZZ),Objektivkappe (PCAPH1056CESA),CD-ROM (UDSKA0043CEN1 für XG-P20XU, UDSKA0045CEN1 für XG-P20XE/XD),Bedienungsanleitung für LCD-Projektor (TINS-7354CEZZ für XG-P20XU, TiNS-7403CEZZ für XG-P20XE, TiNS-7409CEZZ für XG-P20XD),Kurzanleitungen für LCD-Projektor (TINS-7355CEZZ für XG-P20XU, TiNS-7404 CEZZ/TiNS-7405CEZZ für XG-P20XE, TiNS-7500CEZZ für XG-P20XD),Anleitung für dieSharp Advanced Presentation Software (TINS-7356CEZZ für XG-P20XU, TiNS-7406CEZZ für XG-P20XE, TiNS-7407CEZZ für XG-P20XD),Aufkleber für ID-Nummer(TLABZ0781CEZZ)

Dieser Projektor von SHARP ist mit 3 LCD-(Flüssigkristallanzeige) Projektionspaneels ausgestattet.Diese neuartigen Projektionspaneels enthalten TFTs (Dünnschichttransistoren)mit insgesamt 786.432 Bildpunkten (X RGB).Bei allen technologisch fortschrittlichen, elektronischen Geräten,z.B.Gro ß bild-Fernsehern,Videosystemen bzw.Videokameras,sind bestimmte Toleranzgrenzen für die Funktionen gegeben.

Dieses Gerät hat einige inaktive,innerhalb akzeptierter Toleranzgrenzen liegende TFTs,die als beleuchtete oder als nicht aktive Punkte auf der Bildwand wiedergegeben werden.Dies hat keinen Einflu ß auf die Bildqualität und die Lebensdauer des Gerätes.

Änderungen der technischen Daten ohne vorherige Ankündigung vorbehalten.

HINWEIS FÜR DAS WARTUNGSPERSONAL

ACHTUNG: UV-STRAHLUNG

Die Lichtquelle im LCD-Projektor, eine Metall-Halogen-Lampe, gibt eine geringe UV-Strahlung ab.

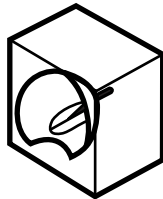
DIREKTE BESTRAHLUNG AUF AUGEN UND HAUT MUSS VERMIEDEN WERDEN.

Zur Gewährleistung der Sicherheit muß folgendes beachtet werden:

1. Bei Arbeiten am Projektor bei eingeschalteter Lampe und abgenommenem oberen Gehäuse muß unbedingt eine Sonnenbrille getragen werden.



2. Die Lampe darf nicht außerhalb des Lampengehäuses eingeschaltet werden.



3. Betrieb für länger als 2 Stunden bei abgenommenem Gehäuse ist nicht zulässig.



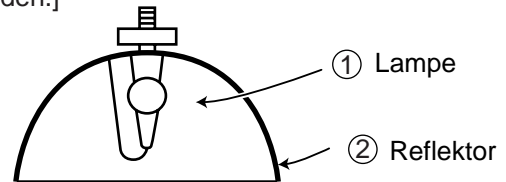
Zur Beachtung bei UV-Strahlung und Mitteldruck-Lampen

1. Vor dem Auswechseln der Lampe muß der Netzstecker gezogen werden.
2. Vor Durchführung von Wartungsarbeiten muß das Gerät eine Stunde abkühlen.
3. Nur mit dem gleichen Lampentyp ersetzen Typ CLMPF0072DE02 oder BQC-XGP20X//1; Nennleistung 85 V/220 W.
4. Die Lampe gibt eine geringe UV-Strahlung ab, daher muß direkter Augenkontakt vermieden werden.
5. Die Mitteldruck-Lampe weist ein Explosionsrisiko auf. Daher müssen die nachstehenden Installationsanweisungen beachtet werden, und die Lampe muß vorsichtig behandelt werden.

■ Auswechseln der Lampe

Hinweis:

Da die Lampe während des Betriebs sehr heiß wird, sollte die Lampe erst ausgewechselt werden, nachdem das Gerät mindestens eine Stunde ausgeschaltet war, damit die Lampe ausreichend abkühlen kann. Beim Installieren der neuen Lampe muß darauf geachtet werden, die Lampe selbst (Glaskolben) nicht zu berühren. Vielmehr muß die Lampe am Reflektor ② gehalten werden. [Es darf nur ein Original-Ersatzteil verwendet werden.]



GEFAHR! — Niemals die Spannungsversorgung einschalten, ohne daß eine Lampe vorhanden ist, um elektrische Schläge und Schäden am Gerät zu vermeiden, da der Stabilisator anfangs hohe Spannungen erzeugt.

Da eine geringe UV-Strahlung aus einer Öffnung zwischen der Schachtabdeckung und dem Lampengehäuse austritt, sollte der Objektivdeckel bei Wartungsarbeiten auf die Öffnung gesetzt werden, um die Bestrahlung von Augen und Haut zu vermeiden (Abb. 1).

Hinweis: Besorgen Sie sich einen Objektivdeckel, bevor Sie Arbeiten an einem Modelle XG-P20XU/XE/XD durchführen, das keinen Objektivdeckel aufweist.

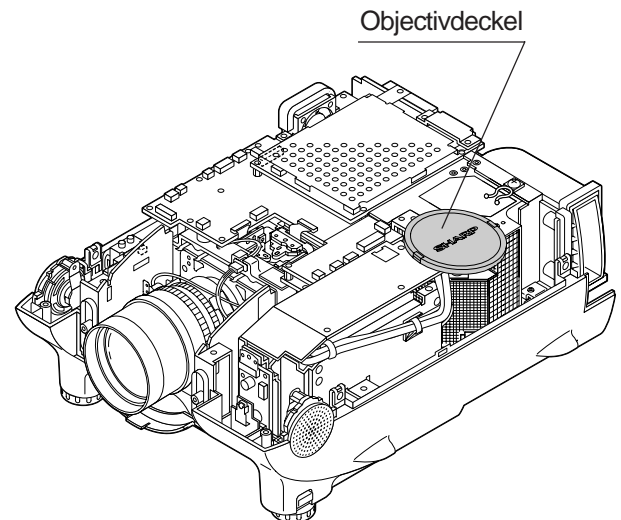
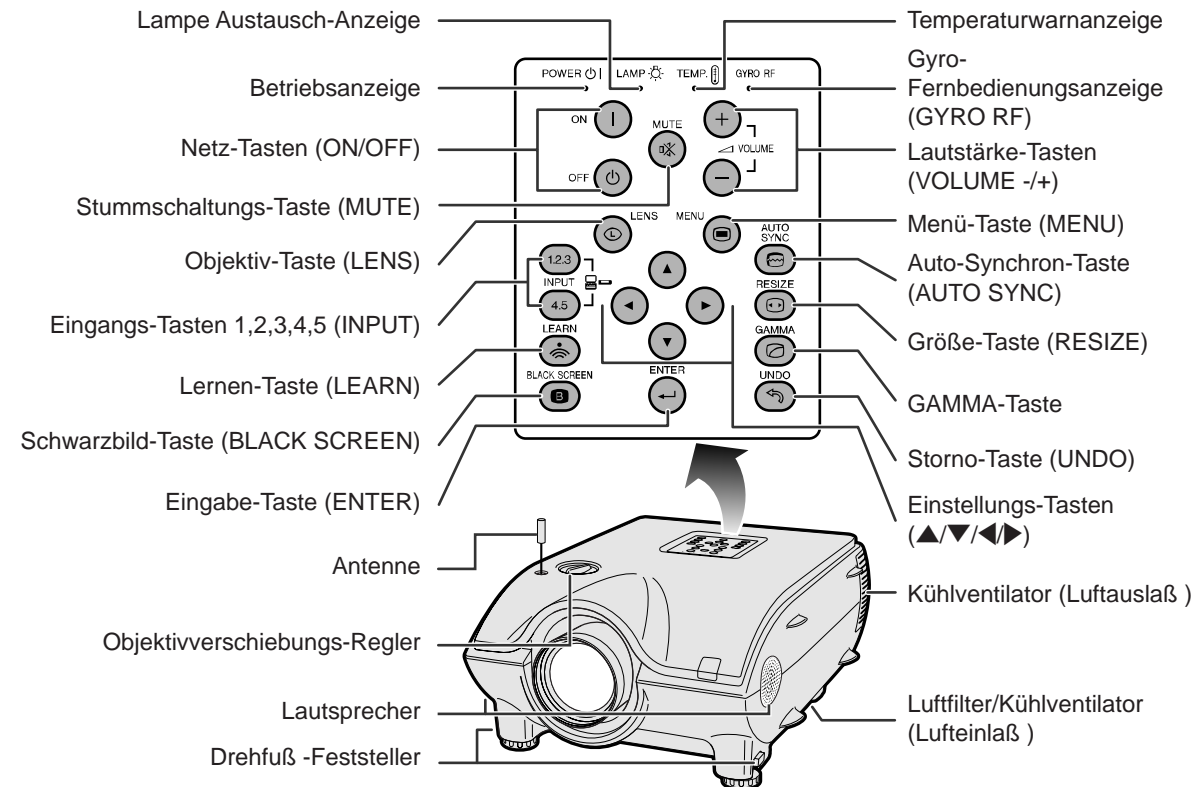


Abbildung 1.

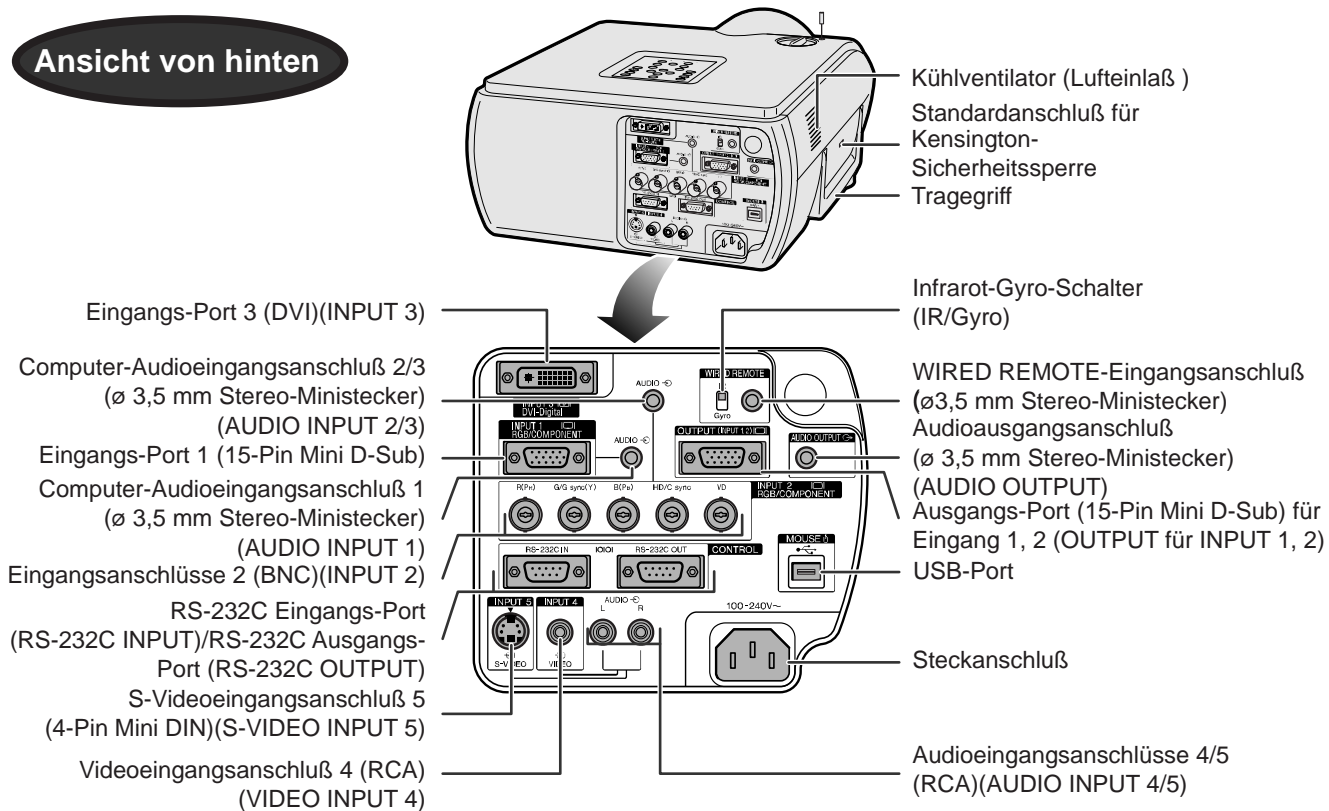
Lage der Bedienelemente

Projektor

Vorderansicht



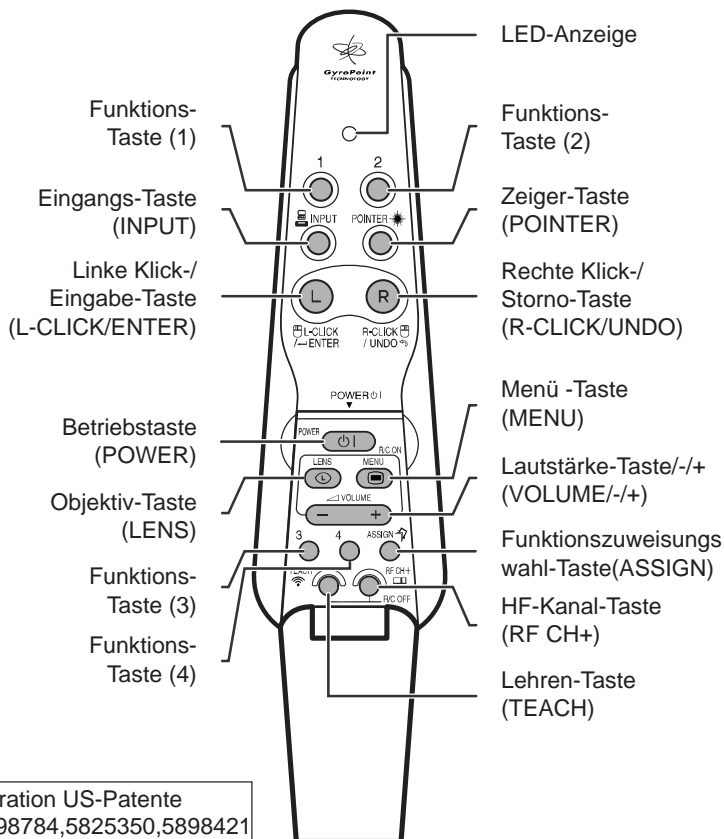
Ansicht von hinten



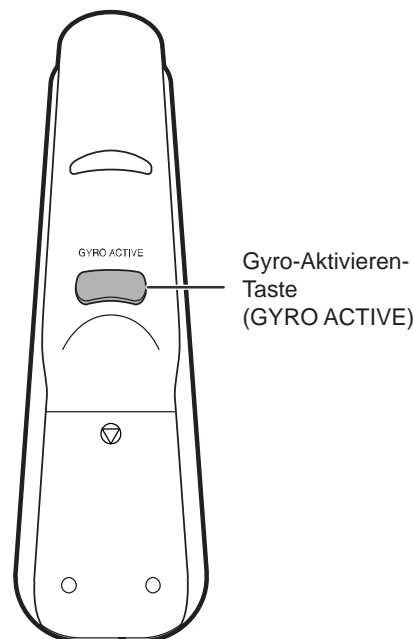
Betrieb mit der drahtlosen Maus-Fernbedienung

GyroRemote-Fernbedienung

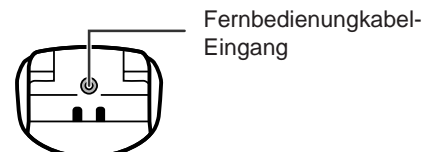
Vorderansicht



Ansicht von hinten



Ansicht von unten



Einlegen und Entfernen der Batterien

Die Batterien sind ab Werk nicht eingelegt. Beim erstmaligen Einlegen der Batterien die Schritte 1, 3 und 4 ausführen.

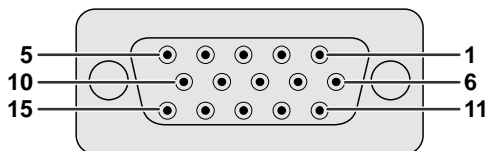
<p>1 Zum Entfernen der Batteriefachabdeckung auf die Pfeilmarkierung drücken und in Pfeilrichtung schieben.</p>	<p>2 Die zwei oberen Batterien entfernen und dann zum Entfernen der Batterien auf der Unterseite des Batteriefachs an den Bändern ziehen.</p>	<p>3 Vier Batterien der Größe AAA einlegen und sicherstellen, daß die Polaritäten mit den Markierungen + und - im Batteriefach übereinstimmen und die Batterien auf den Bändern liegen.</p>	<p>4 Die seitlichen Vorsprünge der Batteriefachabdeckung in die entsprechenden Schlitz einsetzen und auf die Abdeckung drücken, bis sie richtig aufgeschoben ist.</p>
<p>Batteriefach-abdeckung</p>	<p>Batteriefach</p>		<p>Batteriefach-abdeckung</p>

HINWEIS

- Wenn die GyroRemote-Fernbedienung fünf Minuten lang nicht verwendet wird, schaltet sie automatisch auf Betriebsbereitschaft, um die Batterie zu schonen. Durch Drücken einer beliebigen Taste wird die GyroRemote-Fernbedienung wieder aktiviert.

Pinbelegung

INPUT 1 RGB- und OUTPUT (INPUT 1, 2)-Signalanschlüsse: 15-Pin Mini-D-Sub-Buchse



RGB-Eingang

Analog

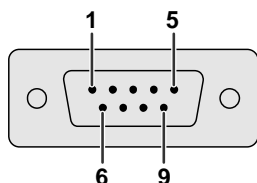
- | | |
|---------------------------------------|-------------------------------|
| 1. Videoeingang (rot) | 9. Nicht angeschlossen |
| 2. Videoeingang (Grün/Sync. auf Grün) | 10. MASSE |
| 3. Videoeingang (blau) | 11. MASSE |
| 4. Reserveeingang 1 | 12. Bi-direktionale Daten |
| 5. Gemischtes Sync.-Signal | 13. Horizontales Sync.-Signal |
| 6. Erdung (rot) | 14. Vertikales Sync.-Signal |
| 7. Erdung (Grün/Sync. auf Grün) | 15. Daten-Zeitgeber |
| 8. Erdung (blau) | |

Komponenten-Eingang

Analog

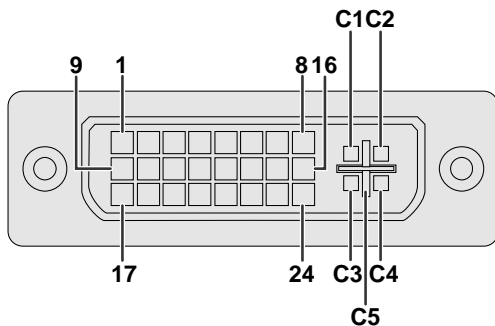
- | | |
|-------------------------------------|-------------------------|
| 1. P _R (C _R) | 9. Nicht angeschlossen |
| 2. Y | 10. Nicht angeschlossen |
| 3. P _B (C _B) | 11. Nicht angeschlossen |
| 4. Nicht angeschlossen | 12. Nicht angeschlossen |
| 5. Nicht angeschlossen | 13. Nicht angeschlossen |
| 6. Erdung (P _R) | 14. Nicht angeschlossen |
| 7. Erdung (Y) | 15. Nicht angeschlossen |
| 8. Erdung (P _B) | |

RS-232C-Anschlußstelle: 9-Pin D-Sub-Stecker des DIN-D-Sub RS-232C-Kabels



Pin Nr.	Signal	Name	E/A	Referenz
1	CD			Nicht angeschlossen
2	RD	Daten empfangen	Eingang	An internen Schaltkreis angeschlossen
3	SD	Daten senden	Ausgang	An internen Schaltkreis angeschlossen
4	ER			Nicht angeschlossen
5	SG	Signalerdung		An internen Schaltkreis angeschlossen
6	DR	Datensatz bereit	Ausgang	Nicht angeschlossen
7	RS	Anforderung zum Senden	Ausgang	An internen Schaltkreis angeschlossen
8	CS	Bereit zum Senden	Eingang	An internen Schaltkreis angeschlossen
9	CI			Nicht angeschlossen

INPUT 3 DVI-Anschluß: 29-Pin

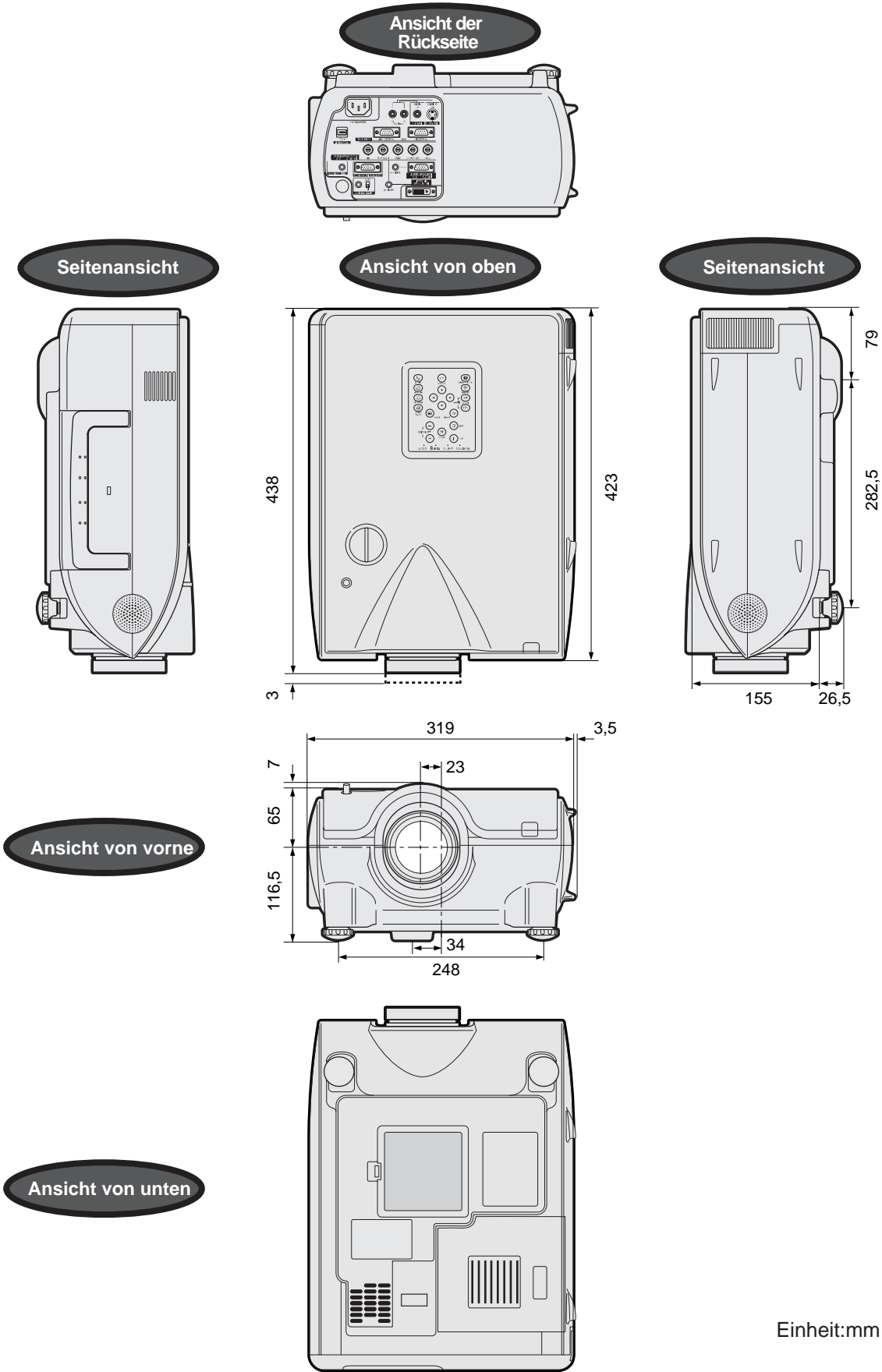


Pin Nr.	Name
1	T.M.D.S. Daten 2-
2	T.M.D.S. Daten 2+
3	T.M.D.S. Daten 2/4 Abschirmung
4	T.M.D.S. Daten 4- * ³
5	T.M.D.S. Daten 4+ * ³
6	DDC Taktgeber
7	DDC Daten
8	Analog Vertikal Sync.
9	T.M.D.S. Daten 1-
10	T.M.D.S. Daten 1+
11	T.M.D.S. Daten 1/3 Abschirmung
12	T.M.D.S. Daten 3- * ³
13	T.M.D.S. Daten 3+ * ³
14	+ 5 V Stromversorgung
15	Masse* ¹
16	Hot Plug festgestellt
17	T.M.D.S. Daten 0-
18	T.M.D.S. Daten 0+
19	T.M.D.S. Daten 0/5 Abschirmung
20	T.M.D.S. Daten 5- * ³
21	T.M.D.S. Daten 5+ * ³
22	T.M.D.S. Taktgeber Abschirmung
23	T.M.D.S. Taktgeber+
24	T.M.D.S. Taktgeber-
C1	Analog Rot
C2	Analog Grün
C3	Analog Blau
C4	Analog Horizontal Sync.
C5	Analog Masse* ²

HINWEIS

- *¹ Rückkehrcode für + 5 V, H-Sync. und V-Sync.
- *² Analog R, G und B Rückkehrcode
- *³ Diese Stifte werden mit diesem Gerät nicht verwendet.

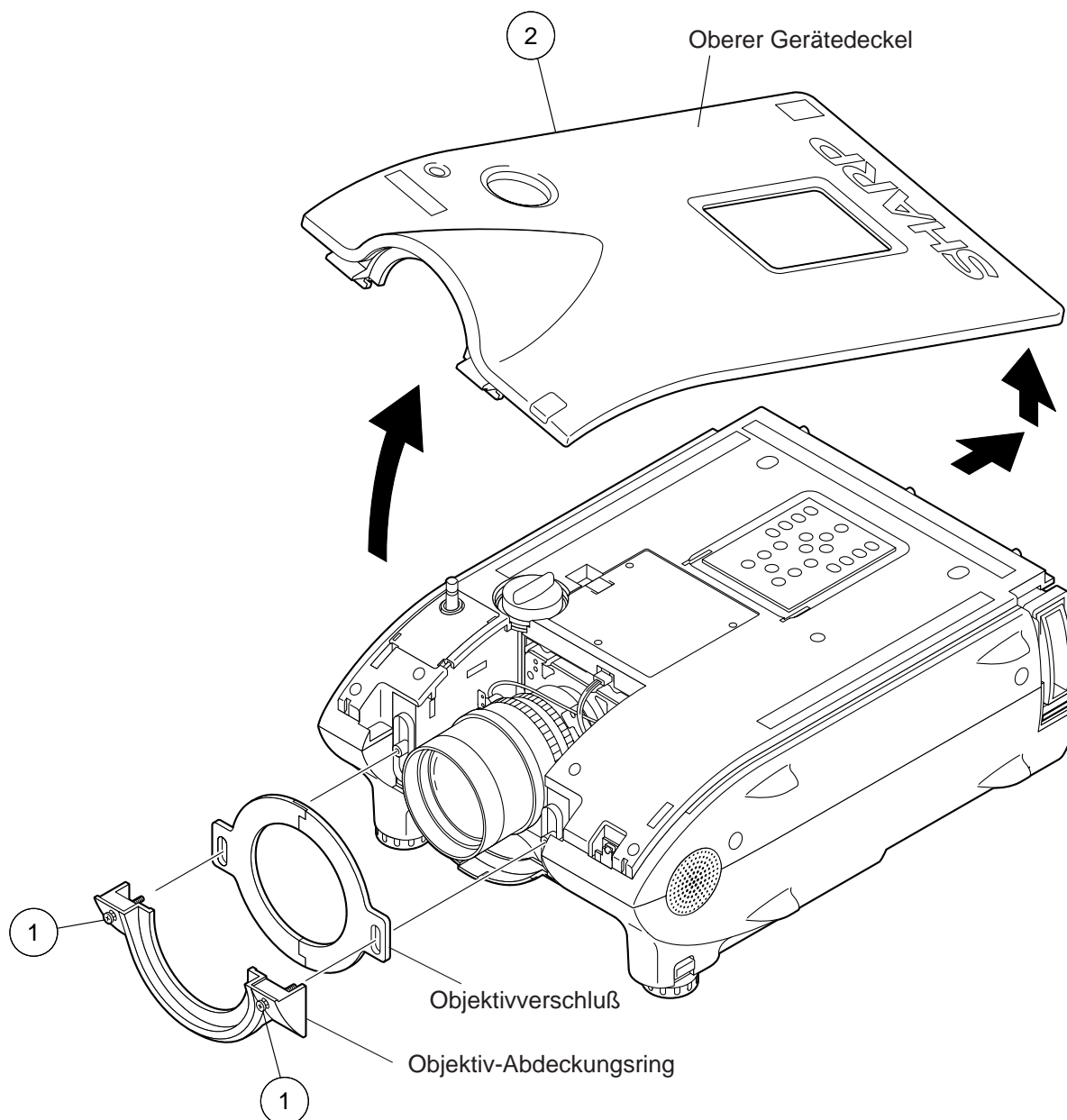
Abmessungen



ENTFERNEN DER HAUPTTEILE

1. Entfernen des oberen Gerätedeckels und des Objektiv-Abdeckungsrings

- 1-1. Die beiden Schrauben losdrehen und den Objektiv-Abdeckungsring abnehmen.
- 1-2. Den oberen Gerätedeckel festhalten und nach oben kippen, bis das hintere Ende in geneigter Stellung stehenbleibt. Danach den Gerätedeckel abschieben und entfernen. Nun den Objektivverschluß abnehmen.
(Wenn der Objektivverschluß wieder eingebaut wird, unbedingt die Markierungen L (links) und R (rechts) in Übereinstimmung bringen.)

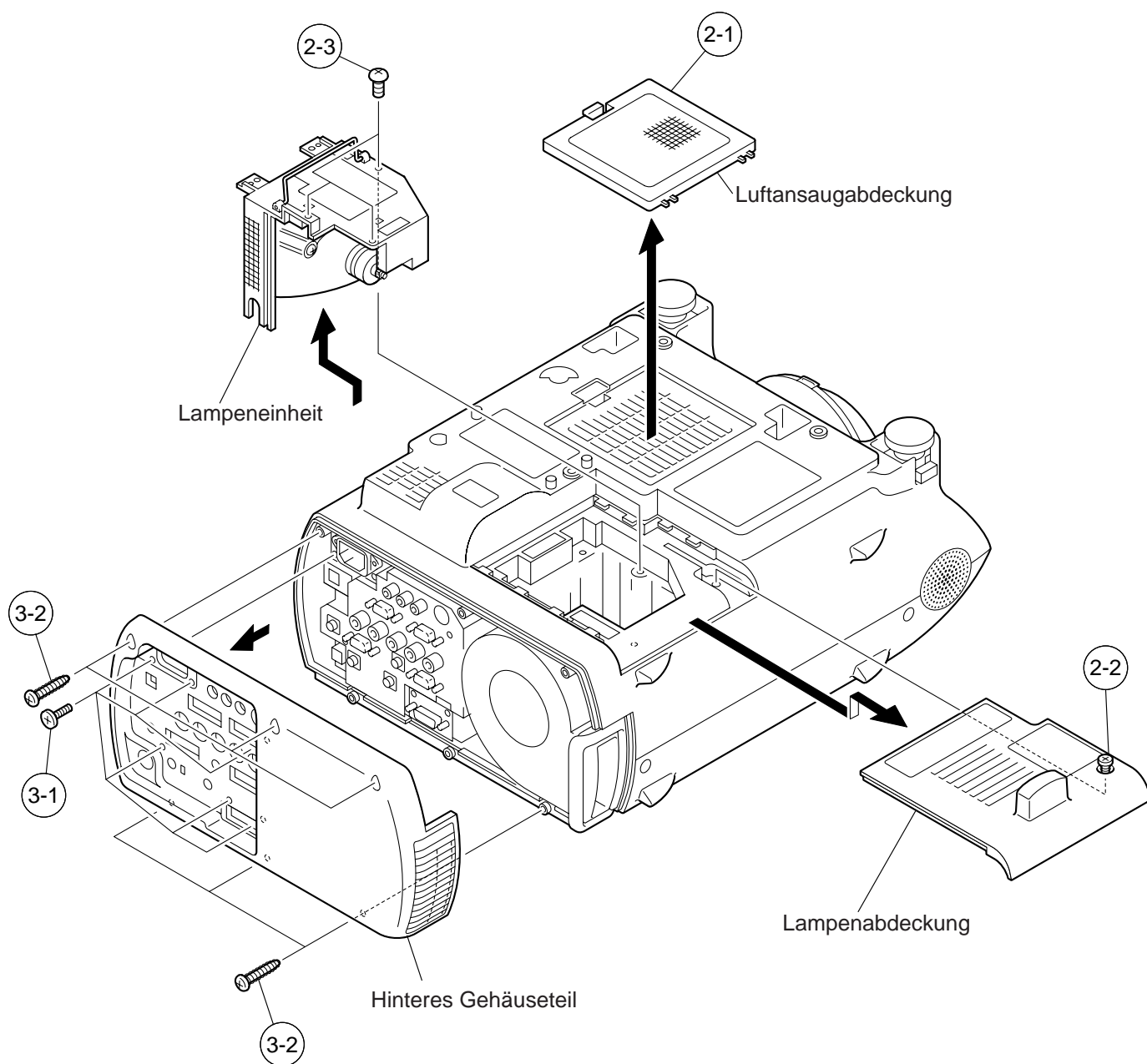


2. Entfernen der Luftansaugabdeckung und der Lampeneinheit

- 2-1. Die Luftansaugabdeckung abnehmen.
- 2-2. Die Schraube losdrehen und die Lampenabdeckung abschieben.
- 2-3. Die drei Schrauben losdrehen und die Lampe herausnehmen.

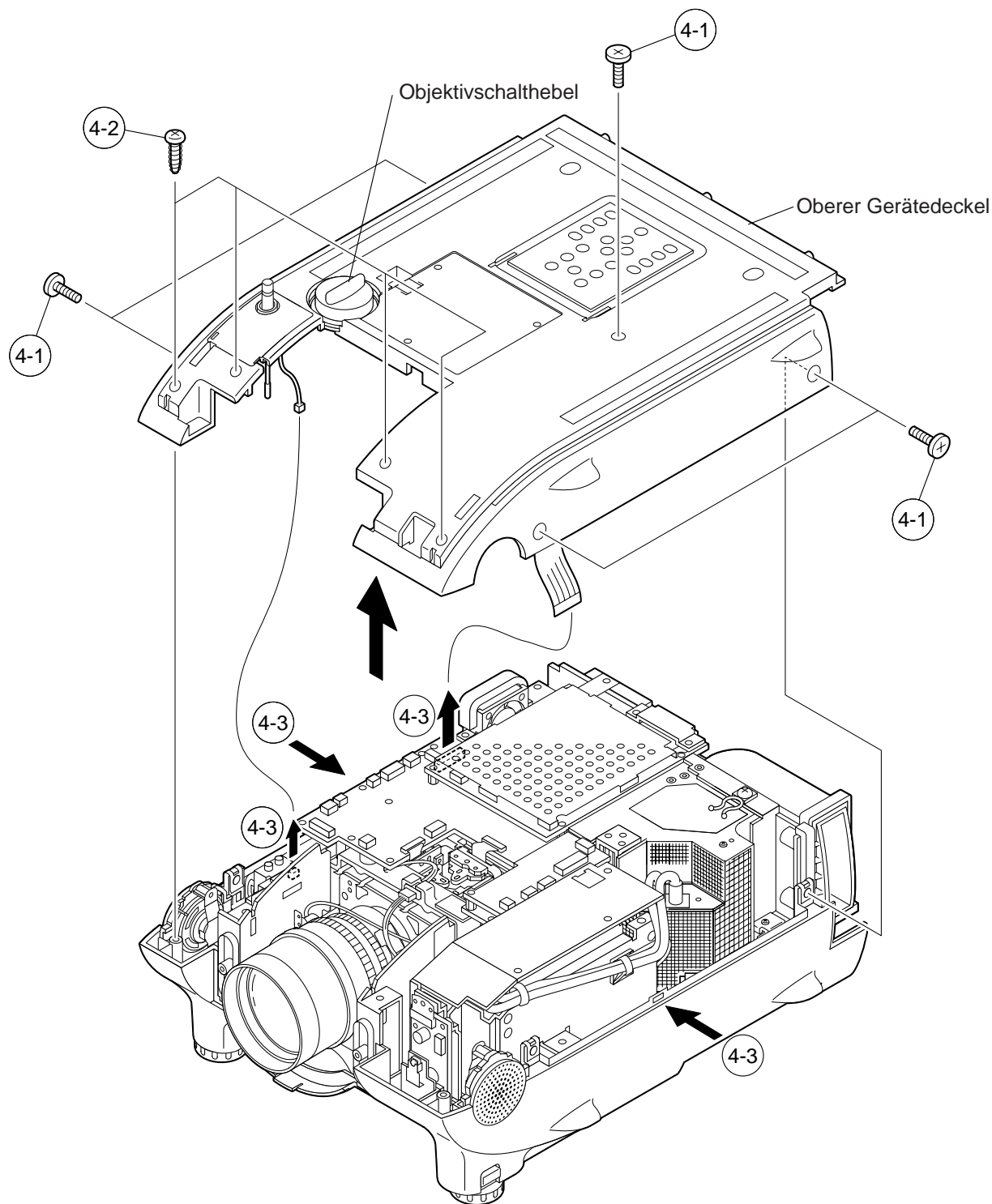
3. Entfernen des hinteren Gehäuseteils

- 3-1. Die sechs Schrauben vom Anschlußbrett am hinteren Gehäuseteil losdrehen.
- 3-2. Die sechs Schrauben losdrehen und das hintere Gehäuseteil abnehmen.



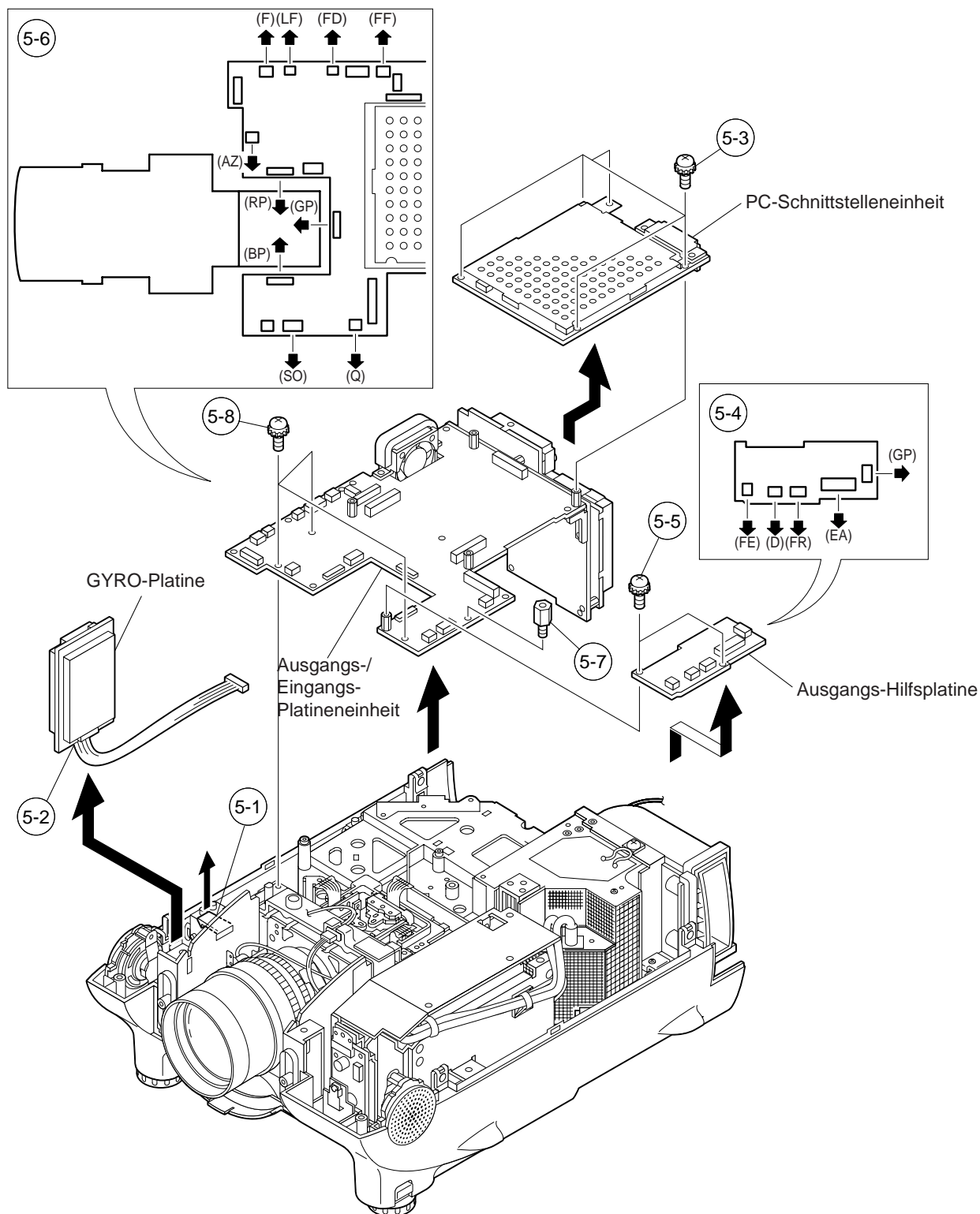
4. Entfernen des oberen Gerätedeckels

- 4-1. Die fünf Schrauben losdrehen.
- 4-2. Die vier Schrauben losdrehen.
- 4-3. An beiden Seiten des Gerätes hineindrücken und die Haken lösen. Den oberen Gerätedeckel mit dem Objektivschalthebel hochheben und die beiden Stecker abziehen.



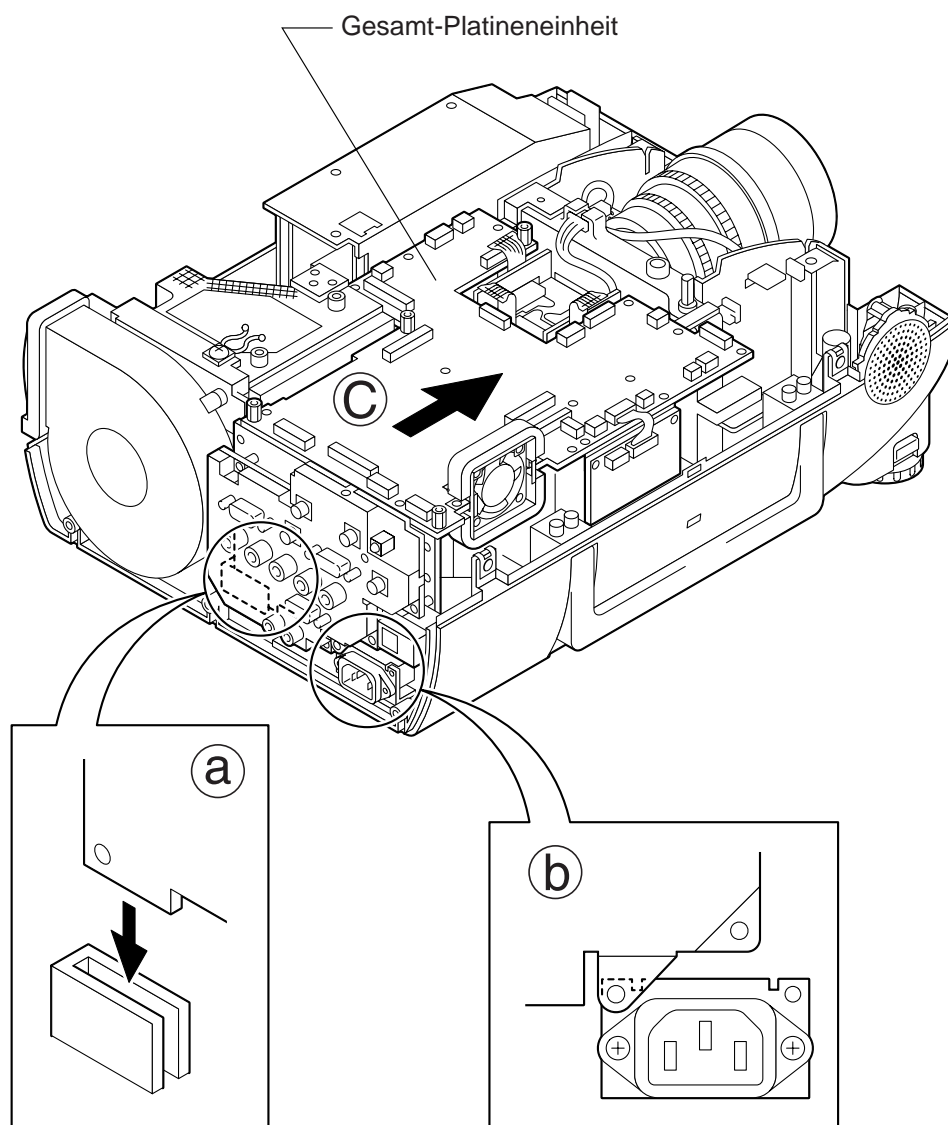
5. Entfernen der Platineneinheit

- 5-1. Die oberen Haken lösen und die GYRO-Platine entfernen.
- 5-2. Die Anschlußstecker von der GYRO-Platine abziehen.
- 5-3. Die fünf Schrauben losdrehen und die PC-Schnittstelleneinheit abnehmen.
- 5-4. Die fünf Stecker abziehen.
- 5-5. Die beiden Schrauben losdrehen und die Ausgangs-Hilfsplatine entfernen.
- 5-6. Die zwölf Stecker abziehen.
- 5-7. Die Sechskanthalterungen herausnehmen.
- 5-8. Die drei Schrauben losdrehen, dann die Ausgangs-/Eingangs-Platineneinheit herausnehmen.



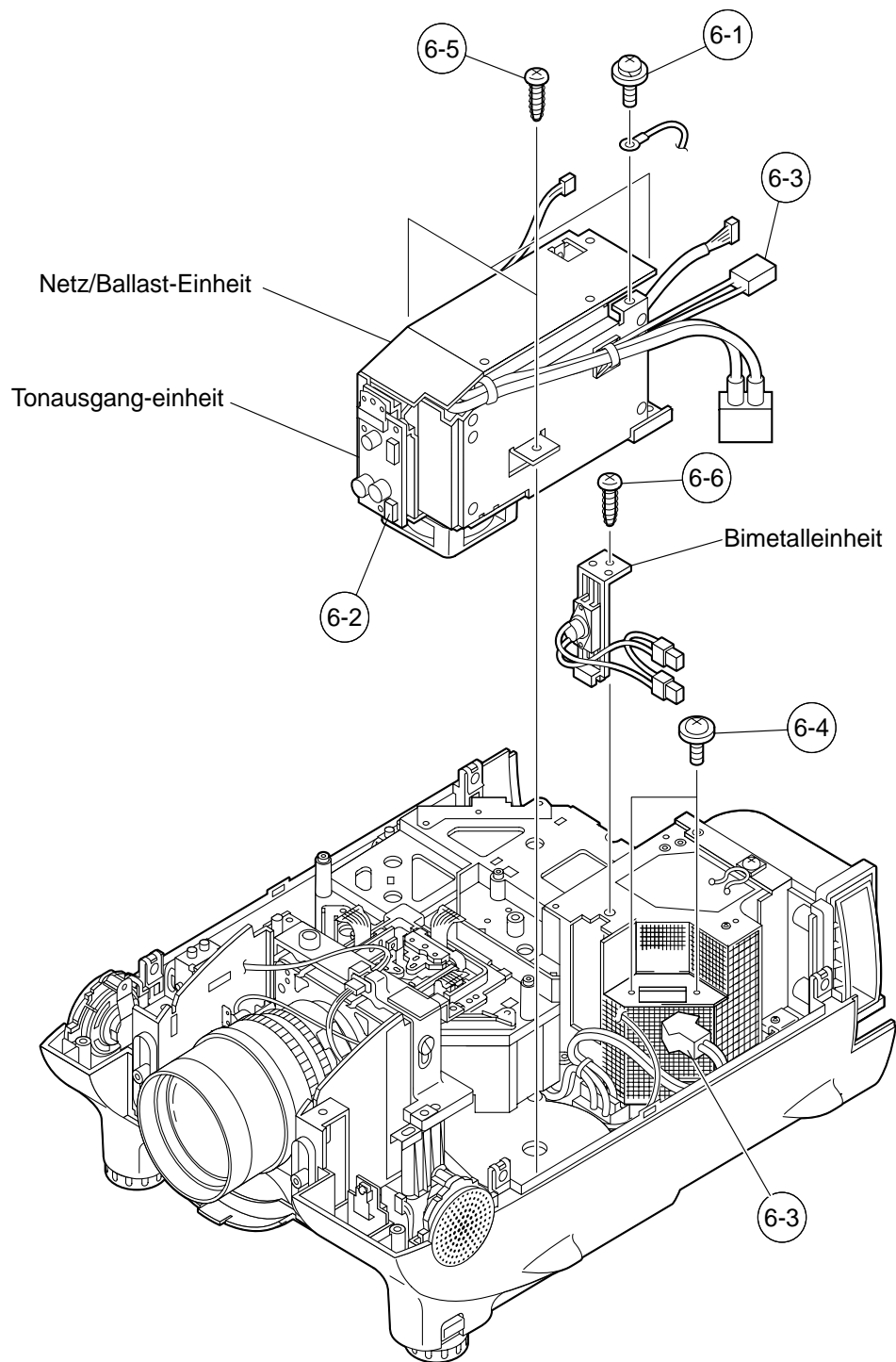
Vorsichtsmaßnahmen beim Einbau

- 5-9. Das Teil ① der Eingangsplatine in den Schlitz der unteren Abdeckung einstecken.
5-10. Die Abschirmung der Eingangsplatine mit der Oberseite der Netzeingangsabschirmung (②) ausrichten.
5-11. Vor dem Festziehen der Schrauben (5-7) sowie der Schrauben und Sechskantmutter (5-8) ist die Platineneinheit ausreichend nach vorne zu schieben (③).



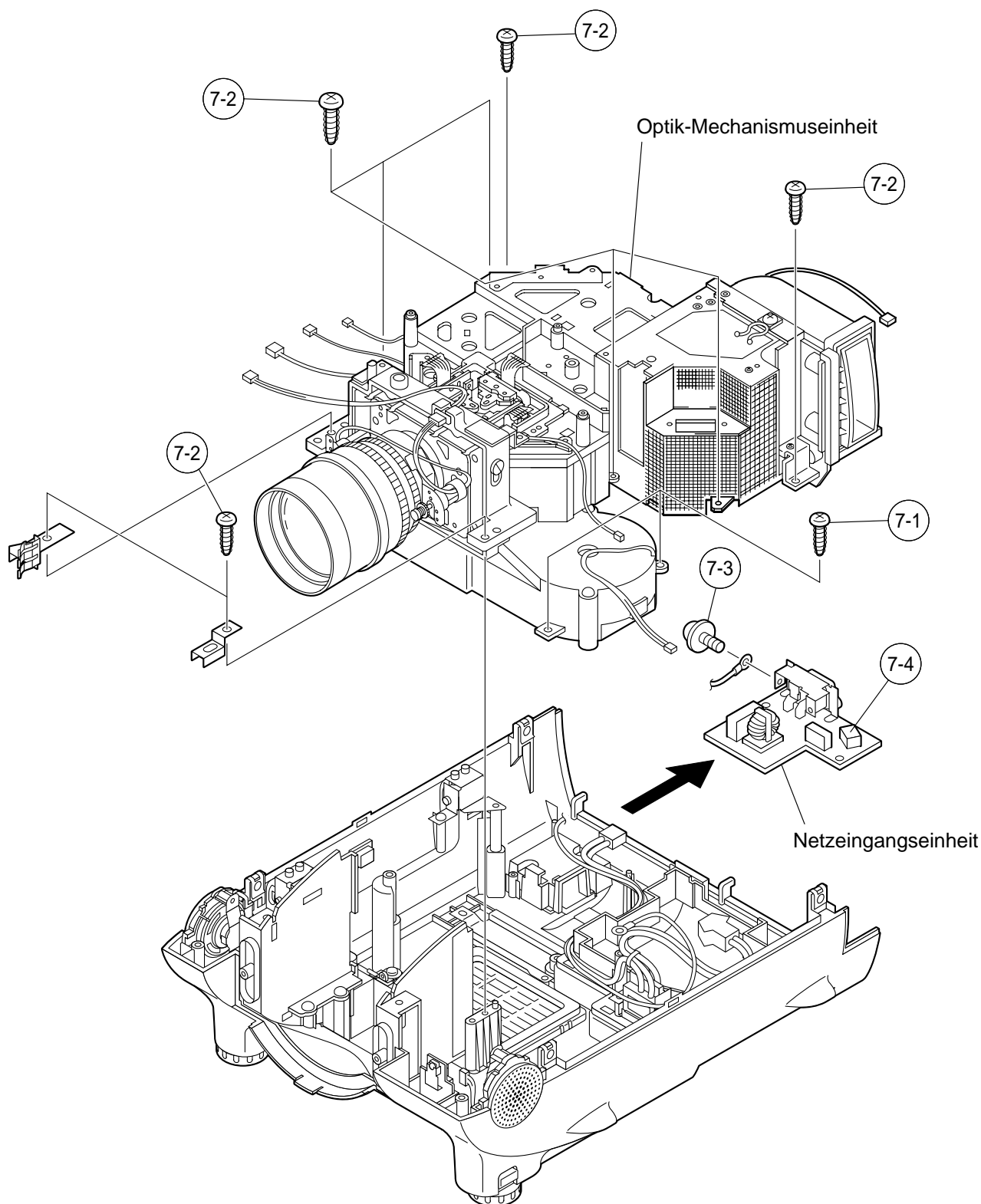
6. Entfernen der Netz/Ballast/Tonausgang/Bimetalleinheit

- 6-1. Die Schraube losdrehen, dann das Erdungskabel vom Abschirmgehäuse der Netz/Ballast-Einheit abziehen.
- 6-2. Die Stecker von der Tonausgangsplatine abziehen.
- 6-3. Die Bimetall-Steckdose herausnehmen.
- 6-4. Die beiden Schrauben losdrehen, dann die Lampenfassung entfernen.
- 6-5. Die drei Schrauben losdrehen, dann das Netzteil entfernen.
- 6-6. Die Schraube losdrehen und die Bimetalleinheit nach oben von ihrer Originalposition herausschieben.



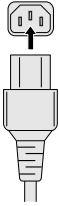
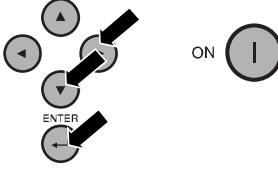

7. Entfernen der Optik-Mechanismuseinheit

- 7-1. Die beiden Schrauben vom Ansauggebläse der Optik-Mechanismuseinheit losdrehen.
- 7-2. Die acht Schrauben losdrehen, dann die Optik-Mechanismuseinheit herausnehmen.
- 7-3. Die Schraube losdrehen und das Erdungskabel anschließen.
- 7-4. Den Stecker abziehen und die Netzeingangseinheit herausnehmen.



RÜCKSTELLEN DES LAMPENBETRIEBSZEIT-TIMERS

Rückstellung des Lampentimers

<h3>1 Das Netzkabel anschließen.</h3> <p>Das Netzkabel am Steckanschluß des Projektors anschließen.</p> 	<h3>2 Den Lampentimer zurückstellen.</h3> <p>Während des Drückens der Tasten ▼, ► und ENTER auf dem Projektor die ON auf dem Projektor drücken.</p> 	<p>„LAMP. 0000H“ wird zum Zurückstellen des Lampentimers angezeigt.</p> 
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HINWEIS

- Der Lampentimer sollte nur nach dem Austauschen der Lampe zurückgestellt werden.

VORSICHT

- Gefährliche Lichtstrahlen. Niemals beim Betrieb des Projektors in die Öffnung oder das Objektiv schauen.

HINWEIS

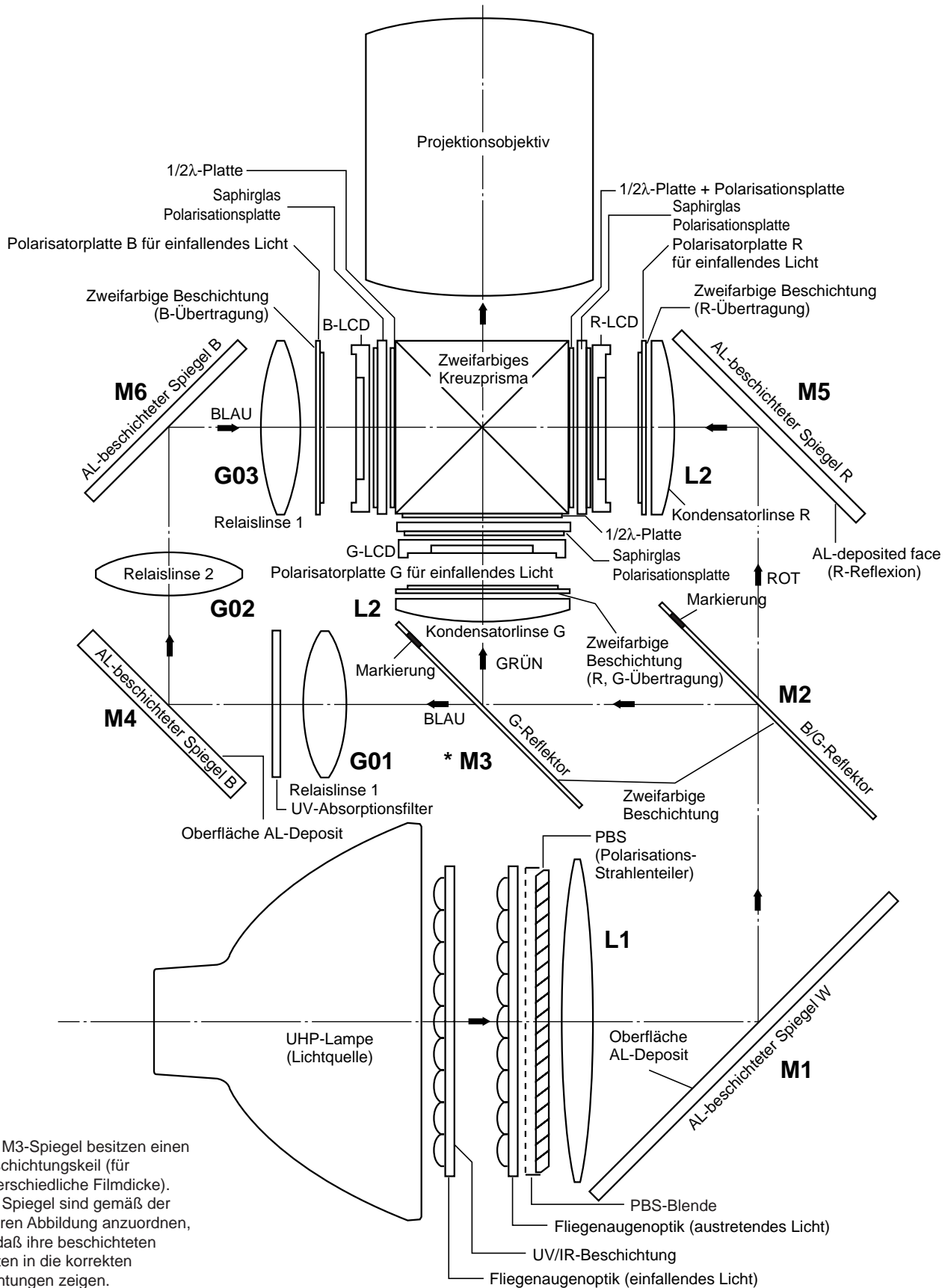
- Wenn die Betriebsumgebung große Unterschiede aufweist, kann die Verwendungsdauer der Lampe weniger als 1.500 Stunden betragen.

Wartungsanzeige	Symptom	Problem	Abhilfe
Temperaturwarn-anzeige	Die Temperatur im Gerät ist zu hoch.	• Belüftungsöffnungen blockiert.	• Den Projektor an einem besser belüfteten Ort aufstellen.
		• Luftfilter verstopft.	• Den Filter reinigen.
		• Kühlventilator beschädigt. • Interne Schaltkreise beschädigt.	• Den Projektor zu einem von Sharp autorisierten Händler für LCD-Projektoren oder dem Kundendienst zur Reparatur geben.
Lampe Austausch-Anzeige	Die Lampe leuchtet nicht auf.	• Ausgebrannte Lampe. • Lampen-Schaltkreis beschädigt.	• Die Lampe vorsichtig austauschen. • Den Projektor zu einem von Sharp autorisierten Händler für LCD-Projektoren oder dem Kundendienst zur Reparatur geben.
Betriebsanzeige	Die Betriebsanzeige blinkt beim Betrieb des Projektors rot.	• Die Abdeckung des Filters ist geöffnet.	• Die Abdeckung des Filters richtig anbringen. • Wenn die Betriebsanzeige blinkt und die Abdeckung des Filters richtig angebracht ist, wenden Sie sich bitte an einen von Sharp autorisierten Händler für LCD-Projektoren oder an den Kundendienst.

ÜBERSICHT DER OPTIKEINHEIT

Übersicht des optischen Systems

Hinweis: Anordnung der Bauteile im optischen System



* Die M3-Spiegel besitzen einen Beschichtungskeil (für unterschiedliche Filmdicke). Die Spiegel sind gemäß der oberen Abbildung anzuordnen, so daß ihre beschichteten Seiten in die korrekten Richtungen zeigen.

EINSTELLUNG VON KONVERGENZ UND BRENNPUNKT

- Bei eingeschaltetem Gerät, entferntem oberem Gehäuseteil und abgenommenen LCD-Abdeckungen mit den Konvergenz- und Brennpunkteinstellungen beginnen. Das Bild wird mit der Fernbedienung eingestellt.
Es sind die folgenden Bedienschritte auszuführen:

1. Fokussieren des Projektionsobjektivs

(A) Auswechseln aller 3 Flüssigkristallanzeigen (LCD)

1. Vor dem Auswechseln aller 3 Flüssigkristallanzeigen ist ein Bild auf die Leinwand zu projizieren und scharf einzustellen.
2. Die Flüssigkristallanzeigen durch neue ersetzen. Solange der Brennpunkt jedoch nicht vollständig eingestellt ist, sicherstellen, daß der Abstand zwischen dem Projektor und der Leinwand nicht verändert wird. Der Fokusserring des Projektionsobjektivs und der Zoomring dürfen ebenfalls nicht verändert werden.
Wenn der Fokusserring mit einem unterschiedlichen Positionsverhältnis nachgestellt wird, wird das Verhältnis zwischen der Projektionsdistanz und der Leinwandgröße beeinflusst. Mit anderen Worten gesagt, kann ein Kurzstanz-Bild (z.B. 40 mm Weitwinkel) außerhalb des Fokusbereichs liegen, während eine Zoomaufnahme (z.B. 300 Teleobjektiv) ebenfalls außerhalb des zulässigen Bereichs liegt.

(B) Auswechseln von nur 1 oder 2 Anzeigen

1. Wenn nach dem Auswechseln von einer oder zwei LCD-Anzeigen eine Brennpunkteinstellung vorgenommen wird, ein Bild auf die Leinwand projizieren, dann Fokusserring verstellen, um die nicht ausgewechselte LCD-Anzeige in den Brennpunkt zu bringen.
2. Solange der Brennpunkt für beide neuen LCD-Anzeigen jedoch noch nicht vollständig abgeschlossen ist, unbedingt darauf achten, daß der Abstand zwischen dem Gerät und der Leinwand nicht verändert wird. Der Fokusserring des Projektionsobjektivs und der Zoomring dürfen ebenfalls nicht verändert werden.
Wenn der Fokusserring verdreht oder das Projektionsobjektiv erneut eingestellt wurde, sind die obigen Schritte 1 und 2 zu wiederholen.

2. Einstellen der G-LCD-Anzeige

(A) Brennpunkteinstellung (Diese Einstellung nur auf weißer Leinwand vornehmen.)

1. Rechte und linke Brennpunkteinstellung (θY -Richtung).
Die Sicherungsschrauben "b" und "c" lockern und einen exzentrischen Schraubendreher in die Kerbe und das Loch "b" einführen. Den Schraubendreher solange drehen, bis sich die linke und rechte Hälfte auf der Leinwand im Brennpunkt befinden.
(Zuerst die rechte und linke Hälfte einstellen, dann die Präzision verbessern, indem die nachfolgende Einstellung (Nr. 2) durchgeführt wird.)
2. Brennpunkteinstellung (oben - Mitte - unten) (θX - und Z-Richtung):
Die Sicherungsschrauben "a" und "c" lockern und einen exzentrischen Schraubendreher in die Kerbe und das Loch "a" oder "c" einführen. Den Schraubendreher solange drehen, bis sich die obere Hälfte, die Mitte und die untere Hälfte im Brennpunkt befinden. Bei der Einstellung des Brennpunkts (oben nach unten) ist die Sicherungsschraube "b" vorübergehend festzuziehen, um die θY -Richtungseinstellung zu fixieren.
3. Die obigen Schritte 1 und 2 wiederholen, um den Brennpunkt feineinzustellen. Schließlich sämtliche Sicherungsschrauben gut festziehen.

Hinweis:

- ① Mit der Brennpunkteinstellung vorsichtig voranschreiten, da die Einstellpositionen in gegenseitigem Bezug zueinander stehen.
- ② Bei der Einstellung der Konvergenz und des Brennpunkts darauf achten, daß das Zoomobjektiv und die Einstellringe bis zur Beendigung aller Einstellungen nicht verstellt werden.

(B) Einstellung der Konvergenz

- Die G-LCD-Anzeige besitzt keinen Konvergenz-Einstellmechanismus. Diese Anzeige als Referenz für die Konvergenzeinstellung benutzen.

3. Einstellung der B-LCD-Anzeige (gleich wie für R-LCD-Anzeige)

(A) Brennpunkteinstellung

- Das gleiche Verfahren wie bei der Brennpunkteinstellung der G-LCD-Anzeige vornehmen. Es wird darauf hingewiesen, daß der Einstellbereich in Z-Richtung klein ist. Sollten die Konvergenzwerte zwischen der B-LCD-Anzeige und der G-LCD-Anzeige zu unterschiedlich sein, die Konvergenz zuerst grobeinstellen und dann die Brennpunkteinstellung vornehmen.

(B) Konvergenzeinstellung

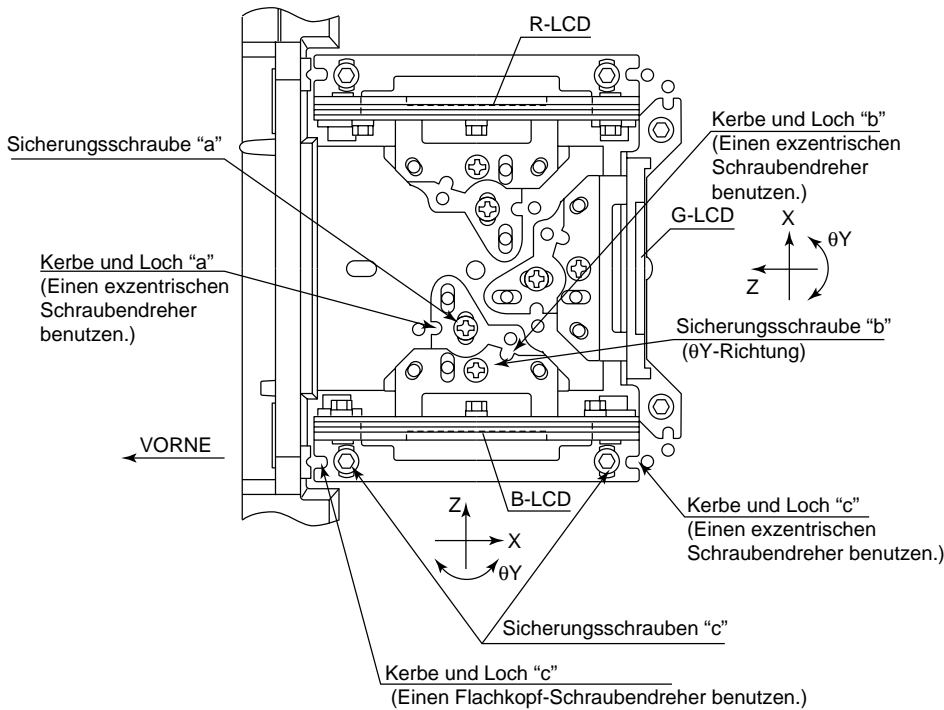
- Für diese Einstellung ist ein Kreuzschraffier-Muster zu benutzen.
Die Einstellung ist ausschließlich für die G-Farbe und die zutreffende Farbe.
- (1) Die Konvergenz-Sicherungsschraube "d" lockern.
- (2) Die Konvergenz-Sicherungsschraube "d" lockern.
- (3) Schließlich die Konvergenz-Sicherungsschraube "d" festziehen.

Hinweis:

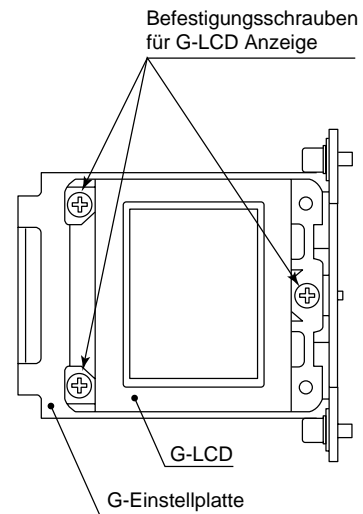
- Der exzentrische Nocken wird für die Einstellung der Konvergenz benutzt. Das bedeutet daß sich der Nocken dreht und die Linearbewegung nicht immer gleichmäßig verläuft.
- Dieses Modell ist nicht mit einem LCD-Bildeinstellmechanismus ausgerüstet. Der Grund liegt in der Benutzung des zweifarbiges Prismas für die Bildformierung. Wenn alle LCD-Anzeigen optimal fokussiert sind, sind die Bilder fast vollständig konvergiert.

Konvergenz- und Brennpunkt-Einstellmechanismus

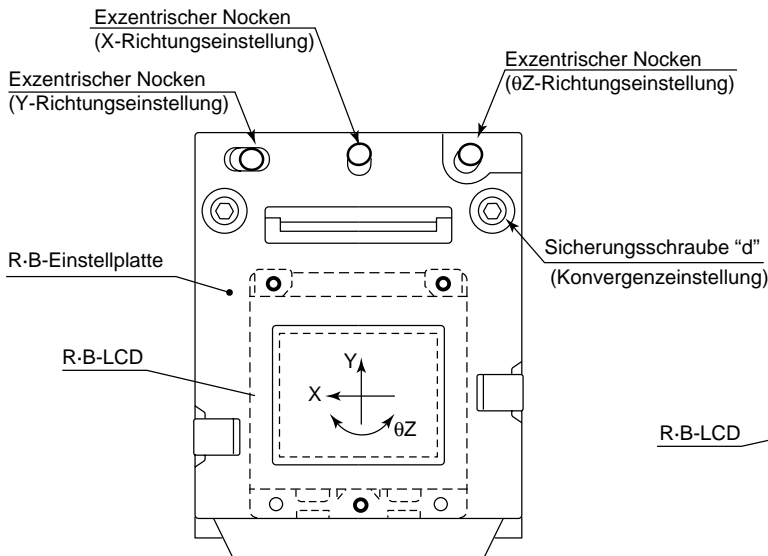
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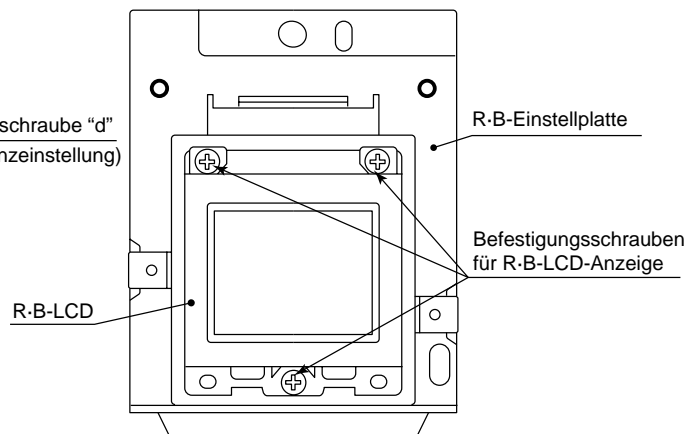
SEITENANSICHT



SEITENANSICHT (von innen)



SEITENANSICHT (von außen)



Konvergenz- und Brennpunkteinstellungen auf einen Blick Einstellrichtungen

Einstellung	Richtung	Definition	Richtung der LCD-Anzeige
Konvergenz	X-Richtung		LCD rechts und links
	Y-Richtung		LCD oben und unten
	θ Z-Richtung	Drehung um die Z-Achse	LCD-Drehachse
Brennpunkt	Z-Richtung		LCD, optische Achse
	θ X-Richtung	Drehung um die X-Achse	LCD, oben bis unten (flattert)
	θ Y-Richtung	Drehung um die Y-Achse	LCD, rechts bis links (flattert)

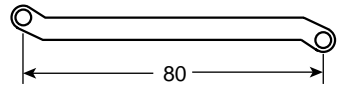
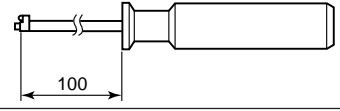
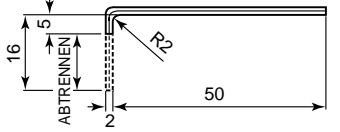
Konvergenz- und Brennpunkteinstellung für den Optikmechanismus

Farbe	Einstellung	Richtung	Bewegung	Position	Einstellwerkzeug	Sicherungsschraube	Festziehwerkzeug
R/B -Farben	Konvergenz	X-Richtung	$\pm 0.8\text{mm}$	Exzentrischer Nocken	Einstellschlüssel für exzentrischen Nocken	d	Innensechskantschlüssel
		Y-Richtung	$\pm 0.8\text{mm}$	Exzentrischer Nocken	Einstellschlüssel für exzentrischen Nocken	d	Innensechskantschlüssel
		θ Z-Richtung	$\pm 1^\circ$	Exzentrischer Nocken	Einstellschlüssel für exzentrischen Nocken	d	Innensechskantschlüssel
	Brennpunkt	Z-Richtung	$\pm 0.8\text{mm}$	Kerbe und Loch "a" und "c"	Exzentrischer Schraubendreher	a, c	Kreuzschlitz- -Schraubendreher *Innensechskantschlüssel
		θ X-Richtung	$\pm 1^\circ$	Kerbe und Loch "a" und "c"		a, c	
		θ Y-Richtung	$\pm 1^\circ$	Kerbe und Loch "b" und "c"		b, c	
G-Farbe	Brennpunkt	Z-Richtung	$\pm 0.2\text{mm}$	Gleich wie für R- und B-Farben			
		θ X-Richtung	$\pm 1^\circ$				
		θ Y-Richtung	$\pm 1^\circ$				

Brennpunkteinstellung in die andere Richtung

Sicherungsschraube	Position	Zugehörige Richtung
a	Kerbe und Loch "a"	Richtungen Z und θ X
b	Kerbe und Loch "b"	θ Y-Richtung
c	Kerbe und Loch "c"	Richtungen Z, θ Z und θ Y

Konvergenz- und Brennpunkteinstellung sowie Festziehwerkzeuge

Werkzeug	Spezifisch oder allgemein	Werkzeugcode	Konfiguration
Exzentrischer Nockeneinstellschlüssel	spezifisch	9DASPN-XGNV1U	
Exzentrischer Schraubendreher	spezifisch	9EQDRIVER-NV1A	
Innensechskantschlüssel	allgemein (verändert)	9EQLNC-XGNV1U	
Kreuzschlitz-Schraubendreher	allgemein	—	Für Linsenrundkopfschraube M2.6
* Innensechskantschlüssel	allgemein	—	Vorzugsweise einen Schraubendreher benutzen, der 70 mm oder länger ist.

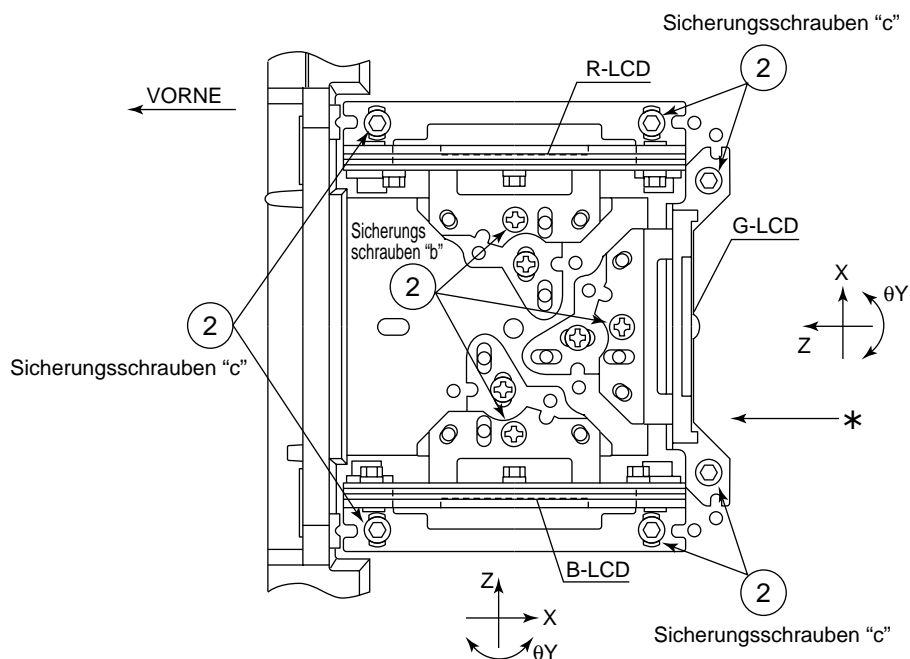
Auswechseln der G-LCD- und B-LCD-Tafeln

Bei entferntem oberem Gehäuseteil

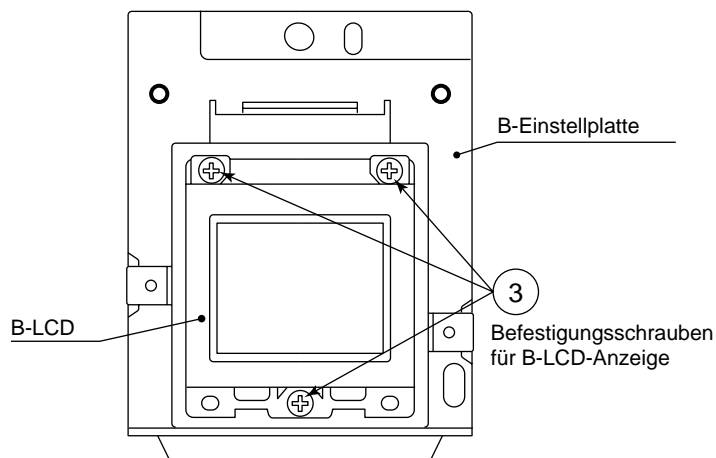
- (1) Das LCD-Flachkabel vom Stecker der Ausgangsplatine abziehen.
- (2) Die Schrauben "b" und "c" losdrehen. Die R/B-Einstellscheibe oder die G-Einstellscheibe zusammen mit der LCD-Tafel abnehmen.
- (3) Die LCD-Tafel von der Einstellscheibe trennen.
- (4) Die neue LCD-Tafel in umgekehrter obiger Reihenfolge (1), (2) und (3) wieder anbringen.

* Die Konvergenz und den Brennpunkt einstellen. Es wird darauf hingewiesen, daß die G LCD-Tafel keine Konvergenzeinstellung erfordert und einen kleinen Einstellbereich in Z-Richtung aufweist.

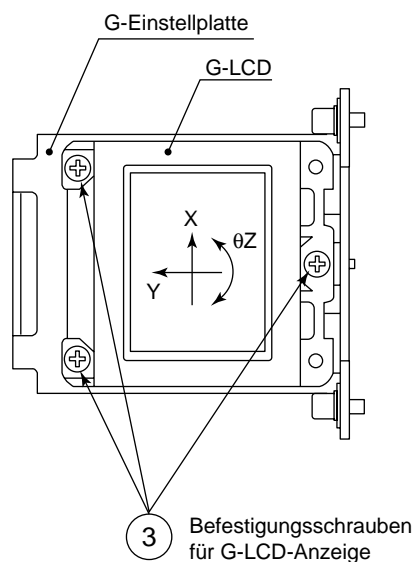
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Auswechseln der R-LCD-Tafel

(1) Das LCD-Flachkabel vom Ausgangsplatinenstecker abziehen.

<Abbildung 1>

(2) Die beiden Schrauben "A" losdrehen.

(3) Die Platte "B" zusammen mit der Einfallslicht-Abdeckplatte anheben und entfernen.

<Abbildung 2>

(4) Die vier Schrauben "C" losdrehen, dann die Einheiten "D" und "E" voneinander trennen.

(5) Die R-LCD-Tafel aus der Einstellplatte herausnehmen.

(6) Eine neue R-LCD-Tafel in umgekehrter Ausbaureihenfolge anbringen.

(7) Die Ablenkplatte einstellen (siehe Seite 68).

(8) Den Brennpunkt und die Konvergenz einstellen (siehe Seite 63).

* Die Konvergenz und den Brennpunkt einstellen. Es wird darauf hingewiesen, daß die G LCD-Tafel keine Konvergenzeinstellung erfordert und einen kleinen Einstellbereich in Z-Richtung aufweist.

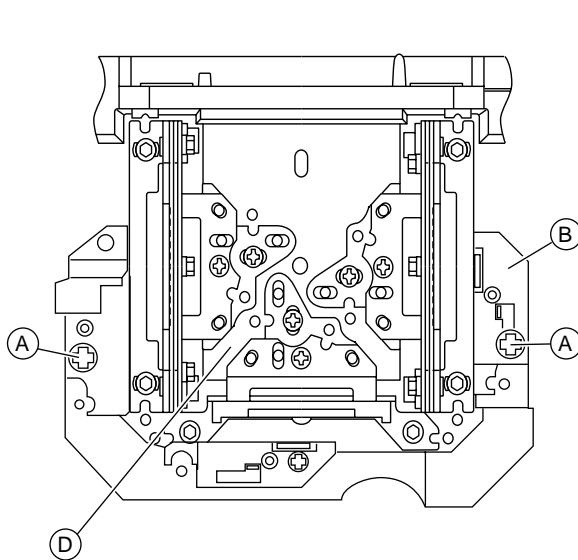


Abb. 1

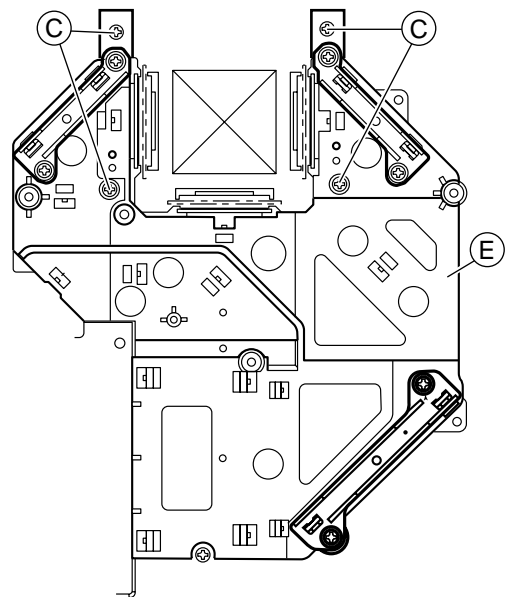
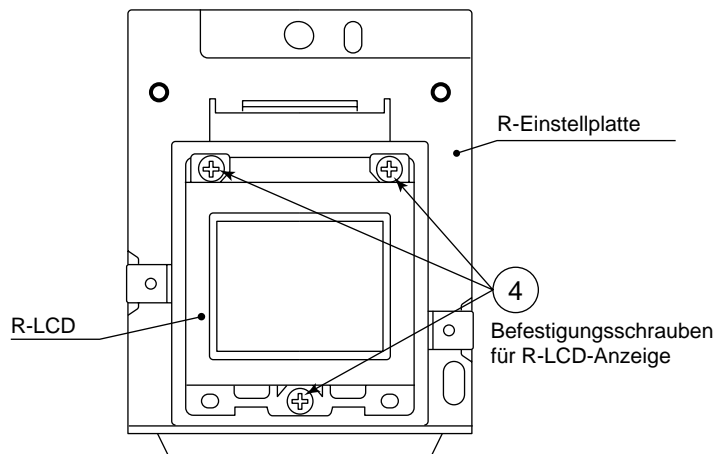


Abb. 2

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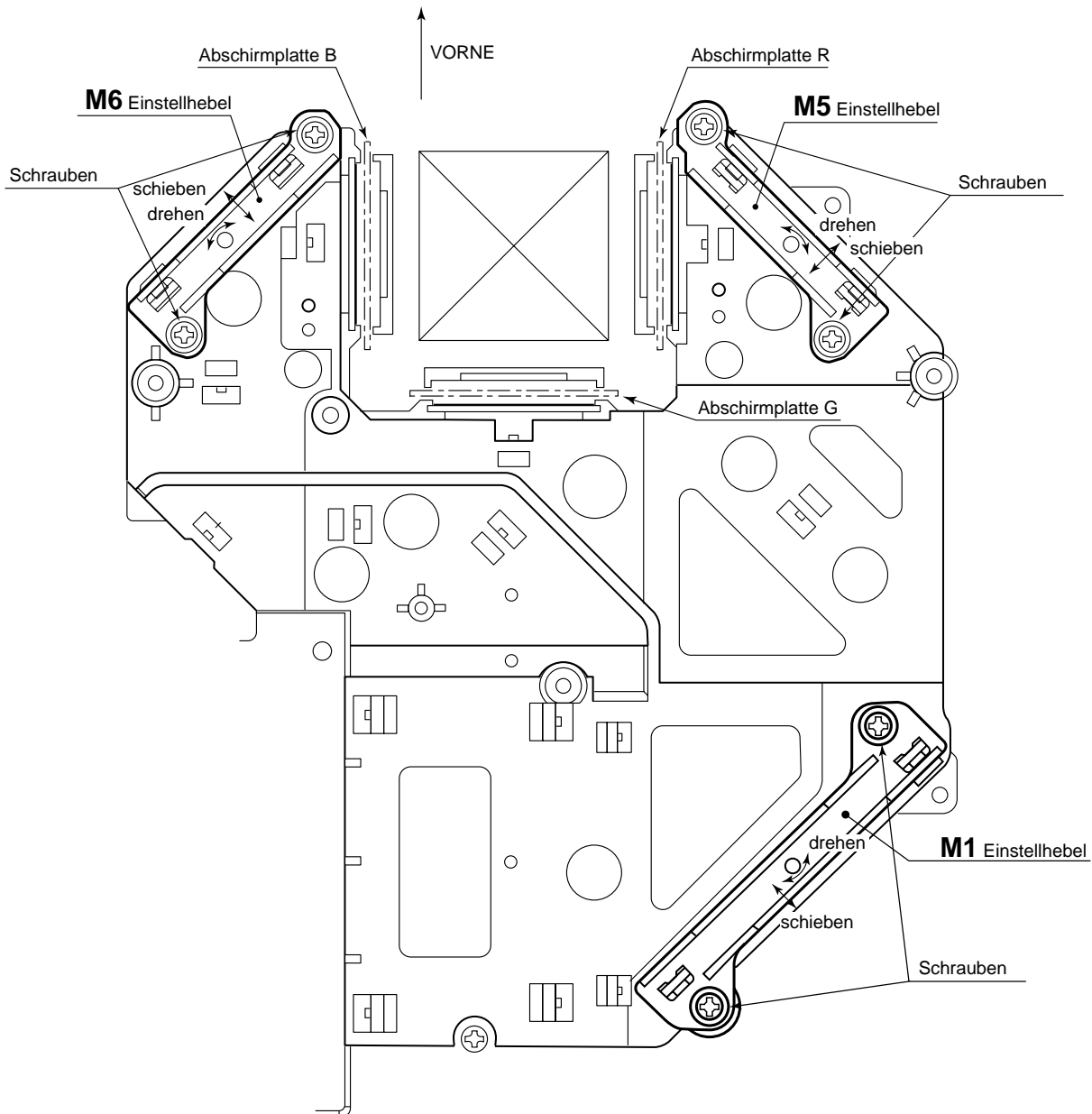


Einstellung der optischen Achse der Spiegel (M1, M5 und M6)

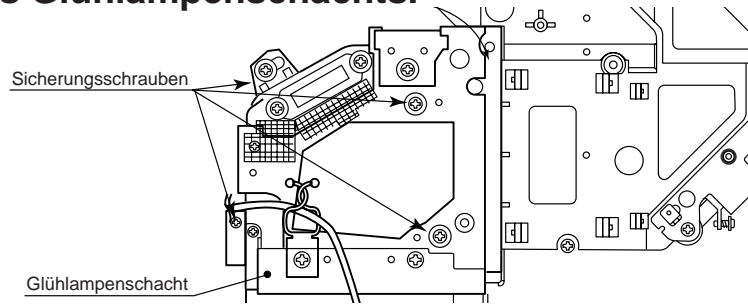
Die optische Achse muß nachjustiert werden, wenn mit den R-, G- oder B-Spiegeln eine Verdunkelung auftritt. Im allgemeinen wird diese Einstellung erforderlich, wenn irgendeine zur Optik zählende Komponente ausgewechselt wird.

Erforderliches Einstellverfahren, wenn eine der Platten ausgewechselt oder die Konvergenz eingestellt wurde:

- (1) Die Flachkabel von allen LCD-Tafeln abziehen.
- (2) Die Lampe einschalten.
- (3) Um den G-Spiegel einzustellen, sind die R- und B-Spiegel mit Abschirmplatten abzudecken. (Um das Licht zu blockieren, kann eine Visitenkarte oder etwas ähnliches verwendet werden.)
- (4) Die Schraube des M1-Einstellhebels lockern.
- (5) Das G-Bild am Bildschirm betrachten und den M1-Einstellhebel soweit verschieben, bis die Abdunkelung am Bildschirm verschwindet. Danach die Schraube wieder festziehen.
- (6) Um den R-Spiegel einzustellen, sind die G- und B-Spiegel mit Abschirmplatten abzudecken und der M5-Einstellhebel einzustellen. Für den B-Spiegel sind die R- und G-Spiegel mit dem M6-Einstellhebel einzustellen. (Die obigen Schritte 4 und 5 durchführen.)
- (7) Alle Abschirmplatten entfernen, die weiß sind.
Sicherstellen, daß keine Verdunkelung vorherrscht.



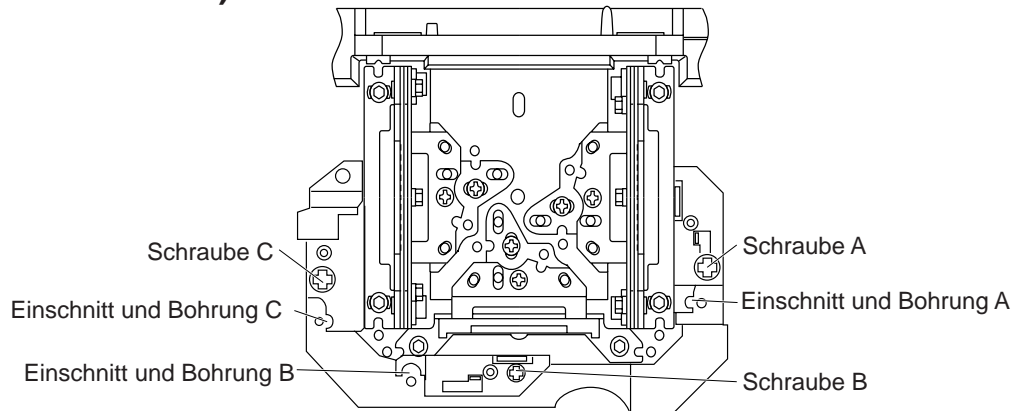
Einstellen des Glühlampenschachts.



Diese Einstellung ist erforderlich, nachdem die Glühlampe ersetzt wurde und eine ungleichmäßige Abbildung erhalten wird (rechte und linke Seite am Bildschirm weisen eine Ungleichmäßigkeit auf).

- (1) Die Glühlampe einschalten.
- (2) Ein Signal für das weiße Testmuster mit 100% zuführen.
- (3) Die vier Sicherungsschrauben des Glühlampenschachts lösen.
- (4) Die weiße Abbildung am Bildschirm beobachten und gleichzeitig den Glühlampenschacht drehen, bis eine optimale Gleichmäßigkeit am Bildschirm erhalten wird.
- (5) Die Sicherungsschrauben des Glühlampenschachts wieder festziehen (Anzugsdrehmoment: 10 ± 2 kg-cm).

Einstellung der Inzidenz-Polarisationsplatte (nach Ausbau der Polarisationsplatte auszuführen).



(Nachdem die obere Abdeckung geöffnet wurde.)

1. Die Schraube herausdrehen, dann die Erdungsplatte von der Ausgangsplatine abnehmen.
2. Jedes FFC-Kabel von R, G und B verlängern (unter Verwendung des 32poligen Verlängerungskabels QCNW-4852CEZZ mit LCD-Ausgangssignal), dann die Platine so verschieben, daß der Einstellbereich für die Polarisationsplatte von oben eingesehen werden kann.
3. Die Stromversorgung einschalten und am Bildschirm einen schwarzen Hintergrund anzeigen.
<Die Inzidenz-Polarisationsplatte für G-LCD einstellen.>
4. Die Ausgangsplatine so verschieben, daß Schraube B sowie Einschnitt und Bohrung B sichtbar sind.
5. Einen Exzenter-Schraubendreher (9EQDRIVER-NV1A) in Einschnitt und Bohrung B einführen, dann Schraube B lösen.

(Die Schraube nicht zu weit zurückdrehen, da sie andernfalls herausfallen kann.)

6. Die Einstellung mit dem Exzenter-Schraubendreher an einer Stelle mit niedriger Umgebungshelligkeit vornehmen, dann die Schraube B festdrehen und fixieren; dabei muß weiterhin ein schwarzer Hintergrund angezeigt werden. Die Einstellung mit Schraube C sowie Einschnitt und Bohrung A durchführen, wenn die Inzidenz-Polarisationsplatte für R-LCD einjustiert wird.

Die Einstellung mit Schraube C sowie Einschnitt und Bohrung C durchführen, wenn die Inzidenz-Polarisationsplatte für B-LCD einjustiert wird.

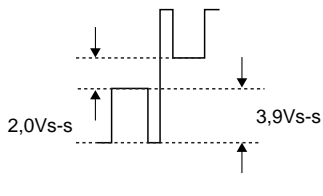
※ Die Einstellung in der Reihenfolge Grün, Rot, Blau an drei Positionen des RGB-Signals durchführen.

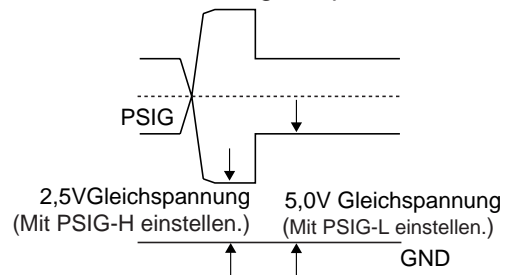
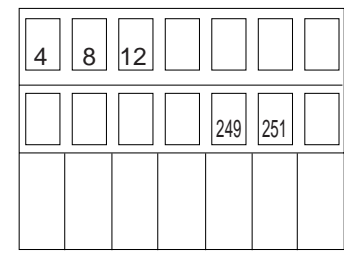
※ Darauf achten, daß beim Verschieben der Ausgangsplatine keine Kurzschluß verursacht wird.

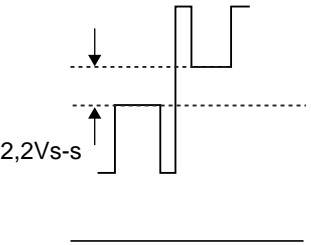
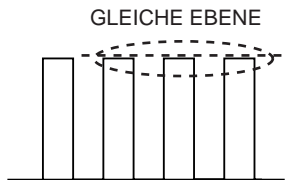
Color	adjustment	Adjustment direction	Amount of adjustment.	Adjustment place form	Ajdustment jig	Fixing screw	Fixed screw tool.
Red	polarizing plate adjustment	θ direction	$\pm 1^\circ$	Notch & Hole A	eccentric screwdriver	A	Phillips screwdriver
Green	polarizing plate adjustment	θ direction	$\pm 1^\circ$	Notch & Hole B	eccentric screwdriver	B	Phillips screwdriver
Blue	polarizing plate adjustment	θ direction	$\pm 1^\circ$	Notch & Hole C	eccentric screwdriver	C	Phillips screwdriver

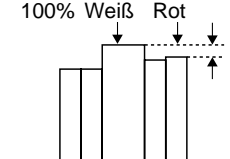
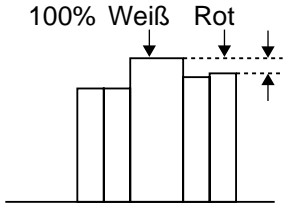
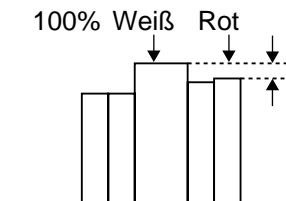
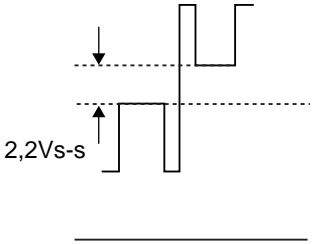
ELEKTRISCHE EINSTELLUNG

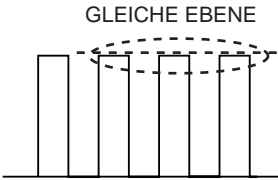
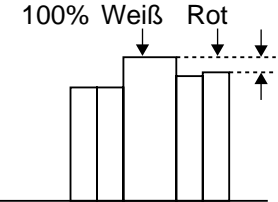
Einen Signalgenerator, PC oder Macintosh-Computer am Projektor anschließen, um die in den Einstellbedingungen spezifizierten Signale zuzuführen.

Nr.	Einstellposition	Einstellbedingung	Einstellverfahren
1	EEPROM-Initialisierung	1. Den Netzschalter einschalten und das Gerät für ca. 15 Minuten vorwärmen lassen. (Sicherstellen, daß die Kontrollampe aufleuchtet.)	<ul style="list-style-type: none"> Folgende Einstellungen vornehmen: S2601 drücken, um den Verarbeitungsmodus abzurufen, und um S2 und S4 im SSS-Menü auszuführen. Das System ist nun initialisiert (PC-Platine nicht miteingeschlossen). S1 darf nicht ausgeführt werden, da die PC-Platine sonst initialisiert wird. Um die Platine einzustellen, die Vorschriften in "Einstellung der Platine" folgen. (Siehe seite 73)
2	R-Antrieb	1. Den nachfolgenden Gegenstand wählen. Gruppe: A/D 2. Das Rotsignal (100%) zuführen und die folgende Wahl treffen. Gruppe : A/D Gegenstand: R-D	<ul style="list-style-type: none"> Die Regelschalter oder die Tasten auf der Fernbedienung betätigen und die Daten so einstellen, daß das Signal "bitlos" (Störung) wird.
3	B-Antrieb	1. Das Blausignal (100%) zuführen und die folgende Wahl treffen. Gruppe : A/D Gegenstand : B-D	<ul style="list-style-type: none"> Die Regelschalter oder die Tasten auf der Fernbedienung betätigen und die Daten so einstellen, daß das Signal "bitlos" (Störung) wird.
4	G-Antrieb	1. Das Grünsignal (100%) zuführen und die folgende Wahl treffen. Gruppe : A/D Gegenstand : G-D	<ul style="list-style-type: none"> Die Regelschalter oder die Tasten auf der Fernbedienung betätigen und die Daten so einstellen, daß das Signal "bitlos" (Störung) wird.
5	Schwarzpegel-Signalamplitude für RGB 1-System (ungeradzahlig)	1. Die folgende Wahl treffen. Gruppe : OUTPUT 1 Gegenstand : G1-BLK G1-GAIN Für Grün sind die Gegenstände R1-BLK und R1-GAIN zu wählen. Für Blau sind die Gegenstände B1-BLK und B1-GAIN zu wählen. 2. Das Oszilloskop anschließen an TP1101 für Rot. TP1201 für Grün. TP1301 für Blau.	<ul style="list-style-type: none"> Den Gegenstand G1-GAIN wählen und den Schwarz-Spitzenpegel auf $3,9 \pm 0,05$ Vs-s Gleichspannung einstellen. Hierfür die Regelschalter oder die Tasten auf der Fernbedienung betätigen. Danach den Gegenstand G1-BLK wählen und die Schwarzpegel-Signalamplitude auf $2,0 \pm 0,1$ Vs-s Gleichspannung einstellen.  <ul style="list-style-type: none"> Die gleichen Einstellungen für Grün und Blau vornehmen.

Nr.	Einstellposition	Einstellbedingung	Einstellverfahren
6	P-SIGNAL	<ol style="list-style-type: none"> Das Oszilloskop anschließen an TP1102 für Rot. Die folgende Wahl treffen. Gruppe : OUTPUT 2 Gegenstand : PSIG-H PSIG-L 	<ul style="list-style-type: none"> Die PSIG-Wellenform so einstellen, daß sie der untenstehenden Abbildung entspricht.  <ul style="list-style-type: none"> Sich vergewissern, daß die Wellenform der roten Farbe ungefähr der Wellenform für die grünen und blauen Farben entspricht.
7	Muster- und Halteimpulsphase RCK-PHASE GCK-PHASE BCK-PHASE	<ol style="list-style-type: none"> Das XGA-Schwarzwertsignal (75 Hz) zuführen. Folgende Wahl vornehmen: Gruppe : OUTPUT 3 Gegenstand: SH-PHASE (Den Standardpegel auf 8 halten.) Die Phaseneinstellungen für G auf 8 fixieren. 	<ul style="list-style-type: none"> Die Einstellung mit den Regelschaltern oder den Fernbedienungstasten vornehmen. Dabei die Einstellung so durchführen, daß die "OUTPUT 3"-Zeichen nicht verschwommen sind bzw. überlappen. Wenn die Zeichen verschwommen sind oder überlappen, muß die Einstellung im Bereich zwischen 7 bis 9 ausgeführt werden.
8	Einstellung der RGB-Gegenspannung	<ol style="list-style-type: none"> Das 25%-Schwarz/Rot-Streifensignal (XGA) zuführen. Folgende Wahl vornehmen: Gruppe : OUTPUT 3 Gegenstand : RC (R) BC (B) GC (G) 	<ul style="list-style-type: none"> Die Daten einstellen, um das Bildflimmern zu reduzieren. Hierfür die Regelschalter oder die Tasten auf der Fernbedienung betätigen. Die gleiche Einstellung für BC (B) und GC (G) vornehmen. Sicherstellen, daß beide Seiten rechts und links am Bildschirm mittig ausgerichtet sind. Falls dies nicht der Fall ist, muß der Bildschirm so eingestellt werden, daß das Bild rechts und links identisch ist.
9	Regenerierungseinstellung für RGB-Abstufung	<ol style="list-style-type: none"> Die INFO COM.-Grauskala und das Farbbalkenmuster zuführen. Die folgenden Einstellungen wählen: Gruppe: OUTPUT 1 Gegenstand: G1-BLK 	<ul style="list-style-type: none"> Sich vergewissern, daß die Skala (weiße Seite) bis Nr. 251 und die Skala (schwarze Seite) bis Nr. 8 sichtbar ist. Wenn die weiße Skala nicht einwandfrei sichtbar ist, muß die Einstellung mit G1-BLK vorgenommen werden. 

Nr.	Einstellposition	Einstellbedingung	Einstellverfahren
10	RGB-Weißbalance	1. Das Grauskalensignal (32 Abstufungen) zuführen (XGA 60Hz). Gruppe : OUTPUT 1 Position : R1-BLK (R) R1-GAIN (R) B1-BLK (B) B1-GAIN (B)	<ul style="list-style-type: none"> Die Daten für R1-BLK und B1-BLK für den Schwarzabgleich an der Grauskala einstellen. Danach die Daten für R1-GAIN und B1-GAIN für den Mitte-/Weißabgleich an der Grauskala einstellen. (Auf den optimalen Punkt einstellen.)
11	Horizontal center	1. Das NTSC-Monoskopsignal zuführen. 2. Gruppe : VIDEO 1 Gegenstand : NTSC-H	<ul style="list-style-type: none"> Die Daten einstellen, um den gleichen Überscan-Wert zu erzielen. Hierfür die Regelschalter oder die Tasten auf der Fernbedienung betätigen.
12	Einstellung der Bildhelligkeit	1. Das Grundfrequenzsignal (0-Schritt-Grauskala: 0% Schwarz zu 100% Weiß) zuführen. Gruppe : VIDEO 1 Gegenstand : BRIGHT 2. Den Regelschalter oder die Stummschalttaste auf der Fernbedienung drücken, um die Gammakorrektur auf die Verarbeitungseinstellung einzustellen.	<ul style="list-style-type: none"> Unter Verwendung der Steuerschalter oder der Fernbedienungstasten die Einstellung entsprechend verändern, bis das Schwarzsinal (0%) bitlos wird.
13	Einstellung des Videobilds	1. Das TrennfARBbalkensignal zuführen. Gruppe : VIDEO 1 Gegenstand : PICTURE 2. Das Oszilloskop zwischen Stift TP1201 und GND anschließen.	<ul style="list-style-type: none"> Die Regelschalter oder die Fernbedienungstasten verwenden und die Weiß-zu-Weiß (100%) Pegeldifferenz auf $2,2 \pm 0,05$ Vs-s einstellen. 
14	Farbton	1. Das TrennfARBbalkensignal zuführen. Gruppe : VIDEO 1 Gegenstand : TINT 2. Das Oszilloskop an TP1301 anschließen.	<ul style="list-style-type: none"> Die Regelschalter oder die Fernbedienungstasten verwenden. Die Einstellung so vornehmen, daß die angezeigten Punkte im Wellenformdiagramm auf gleicher Ebene liegen. 

Nr.	Einstellposition	Einstellbedingung	Einstellverfahren
15	NTSC-Farbsättigungspegel	1. Das Trennfarbbalkensignal zuführen. Gruppe : VIDEO 1 Gegenstand : N-COLOR 2. Das Oszilloskop an TP1101 anschließen.	<ul style="list-style-type: none"> Die Differenz (100%) des Weiß- und Rotanteils auf $0,25 \pm 0,02$ Vs-s einstellen. Hierfür die Regelschalter oder die Tasten auf der Fernbedienung betätigen. (wie bei 100% Weißpegel) 
16	PAL-Farbsättigungspegel	1. Das PAL-Farbbalkensignal zuführen. Gruppe : VIDEO 1 Gegenstand : P-COLOR 2. Das Oszilloskop an TP1101 anschließen.	<ul style="list-style-type: none"> Die Differenz (100%) des Weiß- und Rotanteils auf $0,3 \pm 0,02$ Vs-s einstellen. Hierfür die Regelschalter oder die Tasten auf der Fernbedienung betätigen. 
17	SECAM-Farbsättigungspegel	1. Das SECAM-Farbbalkensignal zuführen. Gruppe : VIDEO 1 Gegenstand : S-COLOR 2. Das Oszilloskop an TP1101 anschließen.	<ul style="list-style-type: none"> Die Daten-Differenz (100%) des Weiß- und Rotanteils auf $0,3 \pm 0,02$ Vs-s einstellen. Hierfür die Regelschalter oder die Tasten auf der Fernbedienung betätigen. 
18	Video-Weißbalance	1. Das NTSC-Monoskopsignal zuführen. Gruppe : VIDEO 2 Gegenstand : R1-BLK B1-BLK	<ul style="list-style-type: none"> Mit den Regelschaltern am Gerät oder über die Fernbedienung die Einstellung so vornehmen, daß die gesamte Bildschirmfläche gleichmäßig unbunt erscheint.
19	DVD-Kontrast	1. Das Farbbalken-Signal des Komponentensignals 480I an der Eingangsklemme BNC G(Y) zuführen. 2. Den nachfolgenden Gegenstand wählen: Gruppe: DVD Gegenstand: CONTRAST (Kontrast)	<ul style="list-style-type: none"> Die Regelschalter oder die Fernbedienungstasten verwenden und die Weiß-zu-Weiß (100%) Pegeldifferenz auf $2,2 \pm 0,05$ Vs-s einstellen. 

Nr.	Einstellposition	Einstellbedingung	Einstellverfahren
20	DVD-Helligkeit	<ol style="list-style-type: none"> 1. Das Farbbalken-Signal des Komponentensignals 480I an der Eingangsklemme BNC G(Y) zuführen. 2. Den nachfolgenden Gegenstand wählen: Gruppe: DVD Gegenstand: CONTRAST (Kontrast) 	<ul style="list-style-type: none"> • Die Regelschalter oder die Fernbedienungstasten verwenden und Einstellung vornehmen, bis das Schwarzsinal (0%) bitlos erscheint.
21	DVD-Tönung	<ol style="list-style-type: none"> 1. Das Farbbalken-Signal des Komponentensignals 480I an den Eingangsklemmen BNC Y, Pb und Pr zuführen. Das Synchronisationssignal nur für das Y-Signal zuführen. 2. Den nachfolgenden Gegenstand wählen: Gruppe: DVD Gegenstand: TINT 3. Das Oszilloskop an TP1301 anschließen. 	<ul style="list-style-type: none"> • Die Regelschalter oder die Fernbedienungstasten verwenden. Die Einstellung so vornehmen, daß die angezeigten Punkte im Wellenformdiagramm auf gleicher Ebene liegen. 
22	DVD-Farbe	<ol style="list-style-type: none"> 1. Das Farbbalken-Signal des Komponentensignals 480I an den Eingangsklemmen BNC G(Y) zuführen. 2. Den nachfolgenden Gegenstand wählen: Gruppe : DVD Gegenstand : COLOR 3. Das Oszilloskop an TP1101 anschließen. 	<ul style="list-style-type: none"> • Die Pegeldifferenz zwischen den 100% weißen und roten Bereichen auf $0,3 \pm 0,02$ Vs-s einstellen. 
23	Einstellung des DVD-Weißabgleichs	<ol style="list-style-type: none"> 1. Das NTSC-Monoskopsignal dem G(Y)-Anschluß von BNC zuführen. 2. Die folgenden Einstellungen wählen: Gruppe: DVD Gegenstand: R1-BLK B1-BLK 	<ul style="list-style-type: none"> • Unter Verwendung der Steuerschalter oder der Fernbedienungstasten den Weißabgleich auf den optimalen Wert einstellen.
24	Überprüfen und Nachstellen des Weißabgleichs	<ol style="list-style-type: none"> 1. Die Einstellbedingungen für jede Position ist nachstehend angegeben. RGB-Eingang: Sich auf Nr. 11 beziehen. VIDEO-Eingang: Sich auf Nr. 19 beziehen. DVD-Eingang: Sich auf Nr. 23 beziehen. 	<ul style="list-style-type: none"> • Sich vergewissern, daß der Weißabgleich optimal eingestellt wurde.

Nr.	Einstellposition	Einstellbedingung	Einstellverfahren						
25	Leistungsprüfung des Farbsystems	1. Das Farbbalkensignal empfangen.	<ul style="list-style-type: none">Im Verarbeitungsmodus L1 anwählen. Die Farbe und die Tönung überprüfen.						
26	Leistungsprüfung des Videosystems	1. Das Monoskopsignal empfangen.	<ul style="list-style-type: none">Im Verarbeitungsmodus L2 anwählen. Die Farbe und die Tönung überprüfen.						
27	Leistungsprüfung des Audiosystems		<ul style="list-style-type: none">Im Verarbeitungsmodus L3 anwählen. Baß, Höhen und Balance überprüfen.						
28	RGB-Leistungsprüfung	1. Das RGB-Signal empfangen.	<ul style="list-style-type: none">Im Verarbeitungsmodus L4 anwählen. Bild, Helligkeit, Rot, Blau, Takt, Phase, Horizontal- und Vertikalposition überprüfen.						
29	Leistungsprüfung Off-Timer		<ul style="list-style-type: none">Im Verarbeitungsmodus OFF anwählen. Sicherstellen, daß der Off-Timer bei "5" (Minuten) beginnt, jede Minute in 1 sec Intervallen herunterzählt und das Gerät bei "0" ausschaltet.						
30	Thermistor-Leistungsprüfung	1. Den Thermistor mit einem Fön erwärmen.	<ul style="list-style-type: none">Sicherstellen, daß "TEMP" angezeigt wird.						
31	Automatische Synchronisierung	1. Das PHASE-Prüfmustersignal empfangen.	<ul style="list-style-type: none">Den VGA/S-VGA/XGA-Modus einschalten und sicherstellen, daß Taktung und Phase sowie Horizontal- und Vertikalposition automatisch einstellbar sind.						
32	Überprüfung der Trapezentzerrungskorrektur		<ul style="list-style-type: none">Sich vergewissern, daß die Trapezentzerrungskorrektur einwandfrei funktioniert.						
33	Werkseinstellungen		<div><ul style="list-style-type: none">Folgende Einstellungen durchführen:<table><tr><th>Verarbeitungseinstellung</th><th>Fernbedienungseinstellung</th></tr><tr><td>S4</td><td>"Werkseinstellung 4" für XU</td></tr><tr><td>S3</td><td>"Werkseinstellung 3" für XE/XD</td></tr></table></div>	Verarbeitungseinstellung	Fernbedienungseinstellung	S4	"Werkseinstellung 4" für XU	S3	"Werkseinstellung 3" für XE/XD
Verarbeitungseinstellung	Fernbedienungseinstellung								
S4	"Werkseinstellung 4" für XU								
S3	"Werkseinstellung 3" für XE/XD								

EINSTELLUNG DER PC-SCHNITTSTELLE (CPCi-0054CE01/02. PC I/F Einheit)

1. Initialisierung des Geräts.

- 1) Den S2601-Schalter drücken, um den Prozeßmodus zu aktivieren.
- 2) S1 des SSS-Menüs durchführen. (Mit S1 wird nur die PC I/F-Platine initialisiert. S2 darf nicht durchgeführt werden, da hierdurch die Einstellenden mit Ausnahme der PC-Platine initialisiert werden.
- 3) Sich vergewissern, daß es sich bei der im Menü enthaltenen Version des SPECIAL-Programms (VER. XXX) um die neueste Version handelt.

2. Einstellung des Pegels

2-1. Einstellen des Oszilloskops

Das Gerät auf einen Bereich zwischen DC 1 V/div und 5µ/div einstellen.

2-2. Anschließen der PC-Schnittstelle

- 1) Das Kabel zwischen dem Ausgangsanschluß ANALOG OUTPUT (am PC) und der DSUB-Buchse (INPUT1 des Projektors) verbinden.
- 2) Am PC den XGA-Modus aktivieren (1024 x 768, 60 Hz, 32-Stufenskala). Die Ausgangsamplitude auf 700 mVs-s (75-Ohm-Abschluß) für die Schwarz-/Weißbereiche einstellen.
- 3) Die Stromversorgung einschalten.

2-3. Einstellen und Überprüfen des Pegels

- 1) Den Schalter S2601 drücken, um den Verarbeitungsmodus aufzurufen.
- 2) SH-PHASE am OUTPUT3-Menü auf 8 einstellen. (Die am Bildschirm abgebildeten Zeichen müssen klar und deutlich abgegrenzt sein.)
- 3) Den Schwarzpegel des roten Signals mit R-BRIGHT von A/D so einstellen, daß die Bits übersprungen werden.
- 4) Den Schwarzpegel des blauen Signals mit B-BRIGHT von A/D so einstellen, daß die Bits übersprungen werden.
- 5) Den Schwarzpegel des grünen Signals mit G-BRIGHT von A/D so einstellen, daß die Bits übersprungen werden.

2-4. Einstellen des DTV

- 1) Den Schalter auf die BNC-Eingangsklemme von INPUT1 einstellen.
- 2) Einen Signalgenerator für das Weißsignal im 1080i 60 Hz-Modus einrichten. Die Ausgangsamplitude erzeugt einen Abstand zwischen Schwarz und Weiß von 700 mVs-s (75-Ohm-Abschluß).
- 3) Den Analog-Ausgangsanschluß des Signalgenerators und den BNC-Stecker (INPUT1-Anschluß des Projektors) mit dem Kabel verbinden.
- 4) G-BRIGHT von DTV als numerischen Wert etablieren, welcher mit G-BRIGHT von "A/D" identisch ist.
- 5) Den Signalausgangspegel auf 53% einstellen, dann mit CB-OFFSET von DTV an einer Stelle einstellen, um bitlos zu werden.
- 6) Den Signalausgangspegel auf 53% einstellen, dann mit CR-OFFSET von DTV an einer Stelle einstellen, um bitlos zu werden.
- 7) Nachdem CB-OFFSET und CR-OFFSET eingestellt wurden, werden zu G-BRIGHT 6 Punkte hinzugefügt.
- 8) S2601 drücken, um den Prozeßmodus zu verlassen.

Vorsichtshinweise zur Wartung

- 1) Wenn sich bei Wartungsarbeiten am Gerät die Konvergenz verschiebt, den Prozeßmodus aufrufen und die nachfolgende Gruppe und Gegenstände wählen.
Gruppe: NOKO
Gegenstand: R-CNV-H, R-CNV-V
G-CNV-H, G-CNV-V
B-CNV-H, B-CNV-V
(H und V repräsentieren die horizontalen bzw. vertikalen Einstellungen.)
Die obigen Einstellungen in einem Bereich zwischen 0 und 4 vornehmen.
- 2) Wenn der Verarbeitungsmodus eingegeben wird, sind die folgende Gruppe und Gegenstände ebenfalls einzugeben:
Gruppe: VIDEO1
Gegenstand: SET-UP B
SET-UP C

Sicherstellen, daß die Einstellungen für SET-UP B und SET-UP C den Werten 10 und 2 entsprechen. Um den Verarbeitungsmodus zu verlassen, sicherstellen, daß eine der folgenden Methoden ausgeführt wird:

Zum Gegenstand SET-UP 1 gehen und den Modus verlassen, oder die Gruppe SSS und den Gegenstand S4 wählen und den Modus verlassen.

EINSTELLUNGSMENÜLISTE

P20X()
A/D
OUTPUT1
OUTPUT2
DTV
OUTPUT3
VIDEO1
VIDEO2
DVD
NOKO
LINE
SSS
PATTERN
CVIC
LENS
SPECIAL



Jede Menüliste

A/D
R-BRIGHT 45
G-BRIGHT 45
B-BRIGHT 45
R-D 83
B-D 83
G-D 83

OUTPUT1
R1-BLK 92
R1-GAIN 143
G1-BLK 90
G1-GAIN 145
B1-BLK 90
B1-GAIN 145

OUTPUT2
PSIG-H 80
PSIG-L 170
R2-BLK 128
G2-BLK 128
B2-BLK 128

DTV
G-BRIGHT 45
CB-OFFSET 16
CR-OFFSET 16

OUTPUT3
RC 127
GC 125
BC 131
SH-PHASE 8
GCK-PHASE 8

VIDEO
NTSC-H 2
PICTURE 45
BRIGHT 128
TINT 130
N-COLOR 108
P-COLOR 107
S-COLOR 110
SET UP 0
SET UP 10
SET UP 1

VIDEO2
R1-BLK 90
B1-BLK 90
PEAK FIL 2
PEAK GAIN 3
N358 DLY 4
PAL DLY 5
SECAM DLY 0

DVD
CONTRAST 22
BRIGHT 196
TINT 32
COLOR 21
R1-BLK 90
B1-BLK 90

NOKO
NOKO-LH OFF
NOKO-RL OFF
CC 00
R-CNV-H 2
G-CNV-H 2
B-CNV-H 2
R-CNV-V 2
G-CNV-V 2
B-CNV-V 2

LINE
L1
L2
L3
L4
OFF
TEMP OFF
SENSE CHECK
ID CHECK

SSS
TIME
S1
S2
S3
S4
S5
LAMP

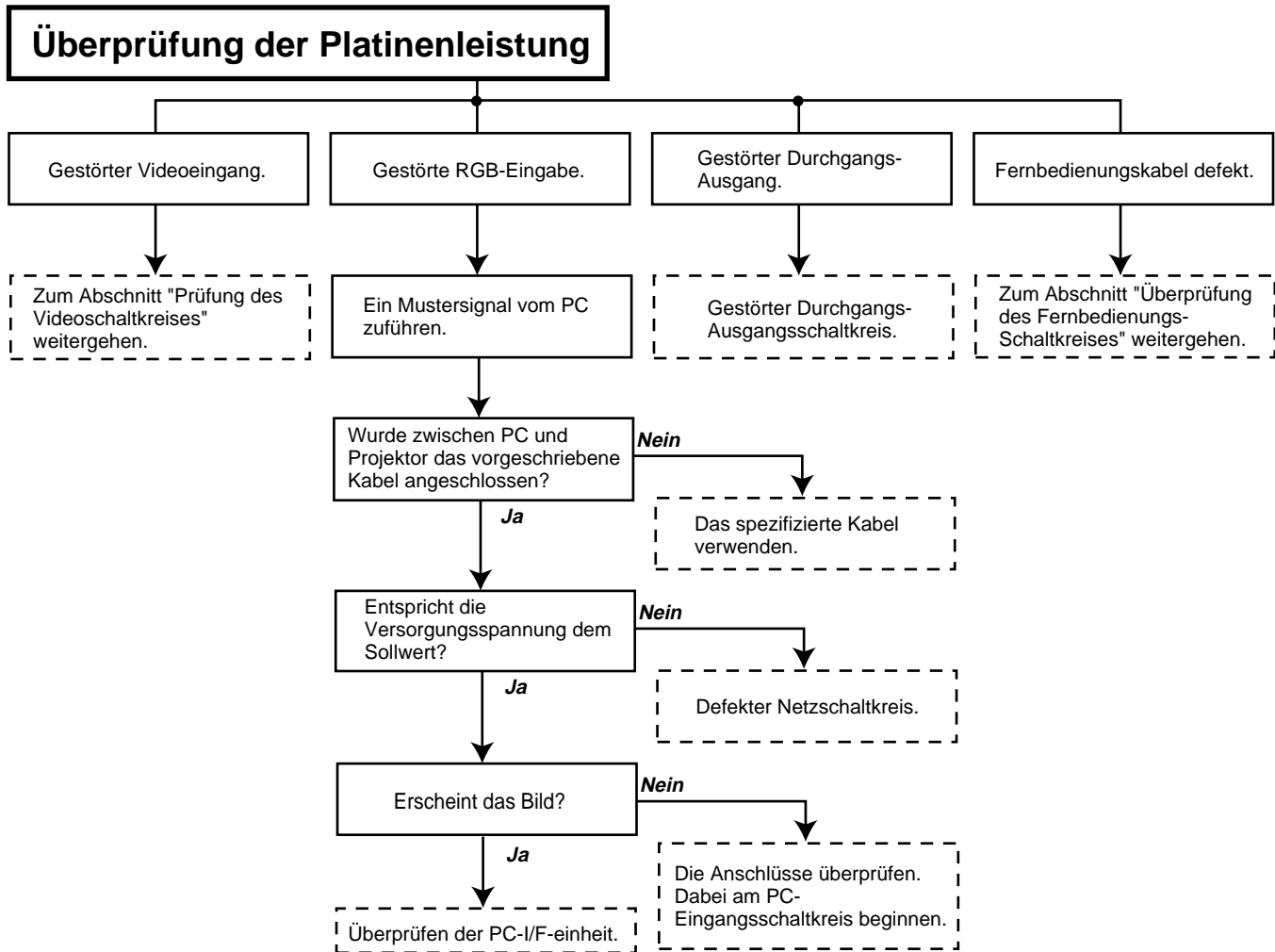
PATTERN
RGB 1
RGB(50) 2
CROSS 1
STEP
COLOR
CHR 1

CVIC
PROGRESSIVE
ENHANCE-VIDE
ENHANCE-HDTV
ENHANCE-RGB
SCREEN
IDC

LENS
LENS AUTO
LENS TOP
LENS BOTTOM

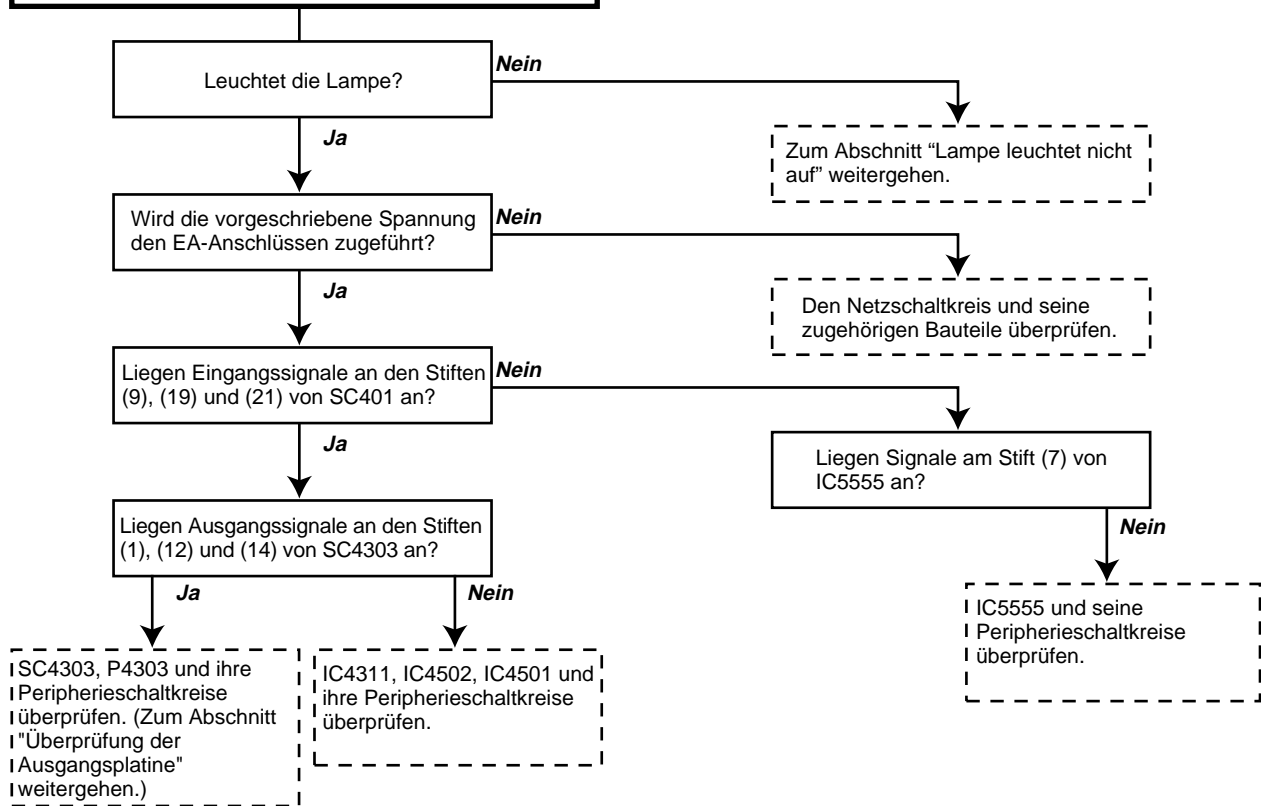
SPECIAL
IPL
E2PROM
ADR RD/WR
PRG VER.0223
OSD VER.0215
SUB VER.S0201b
CVIC VER.0216

FEHLERSUCHTABELLE

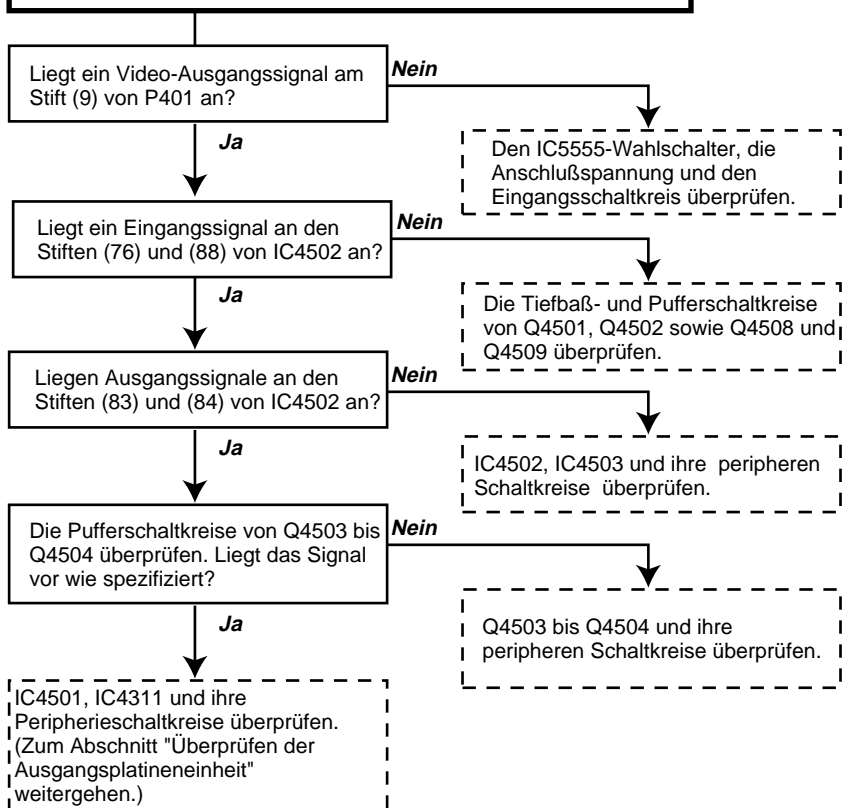


FEHLERSUCHTABELLE (Fortsetzung)

Überprüfung des Videosystems

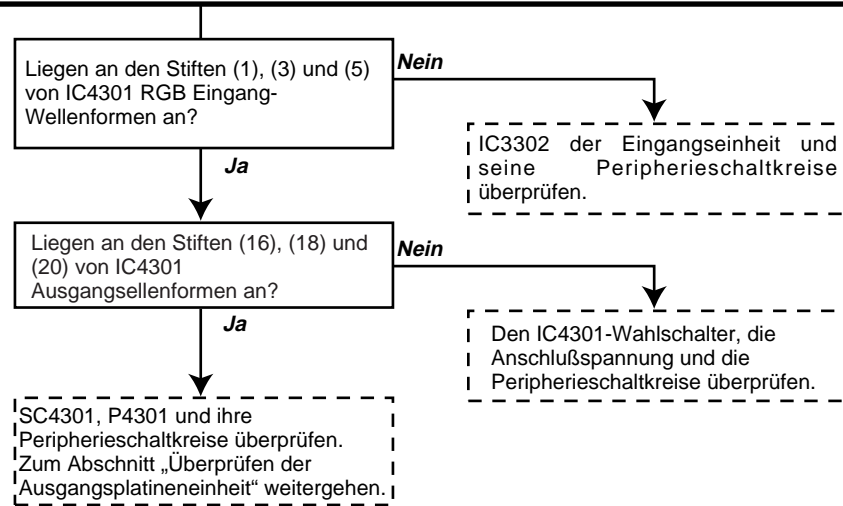


Überprüfung des Videoschaltkreises

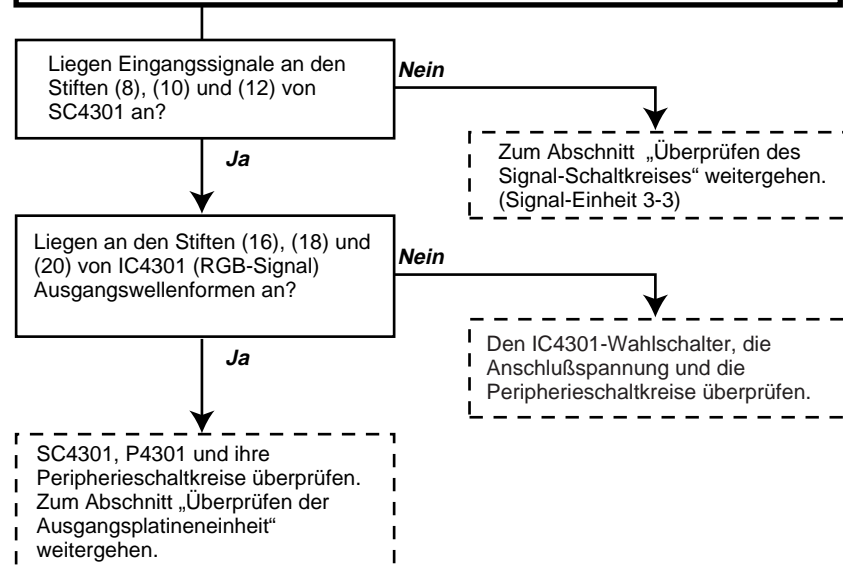


FEHLERSUCHTABELLE (Fortsetzung)

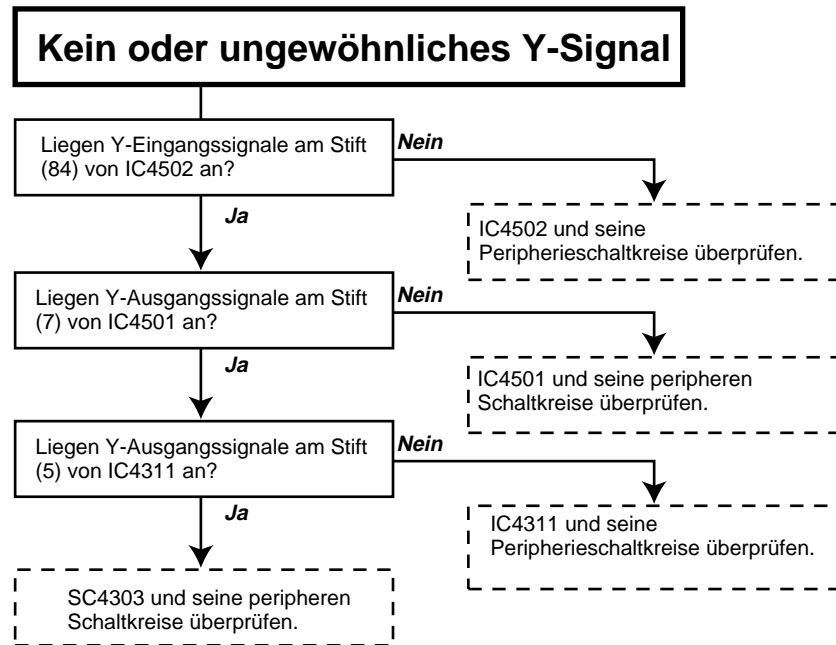
Überprüfung des RGB-Ausgangssignalkreises



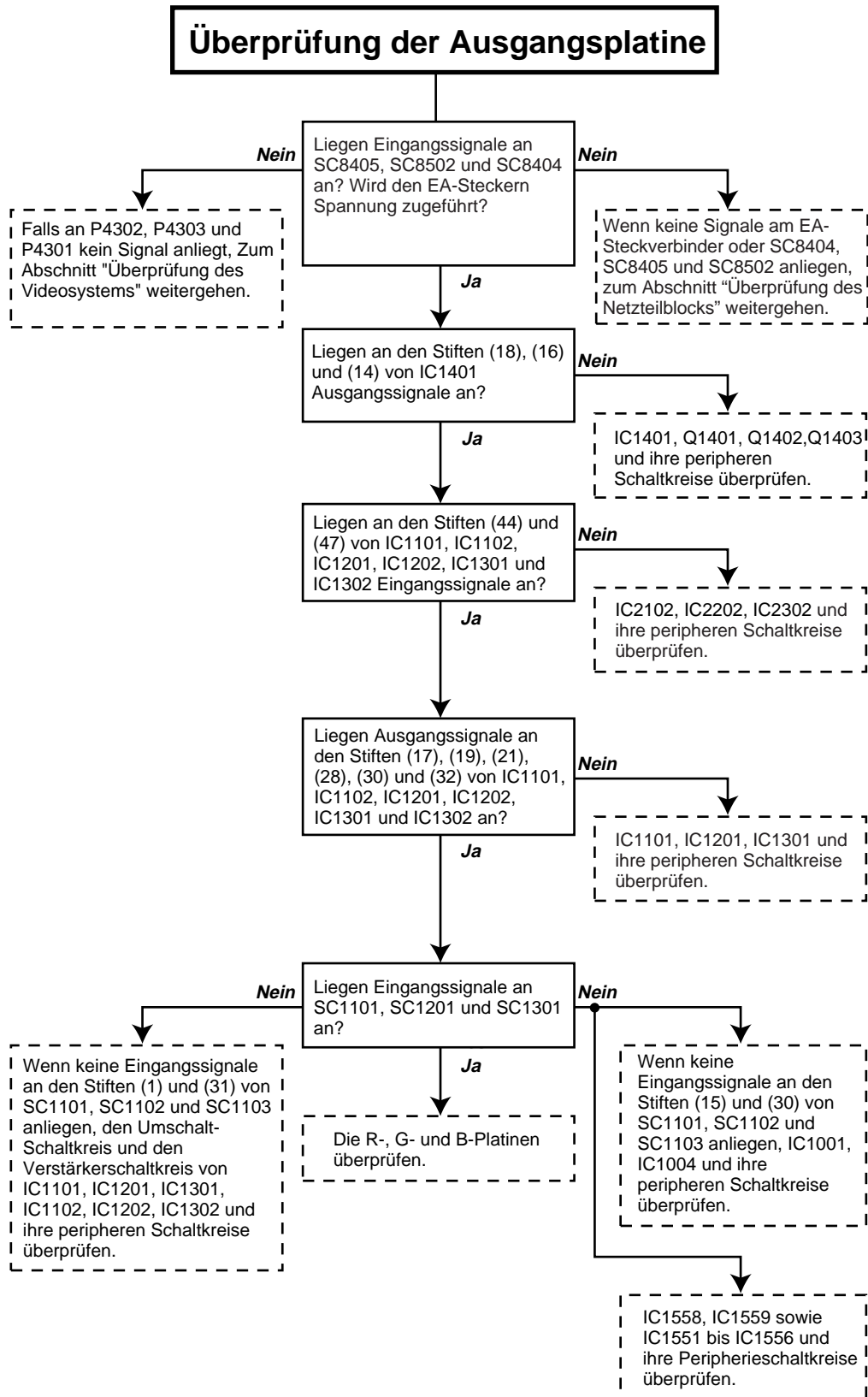
Überprüfen der Signale 480P und 720P



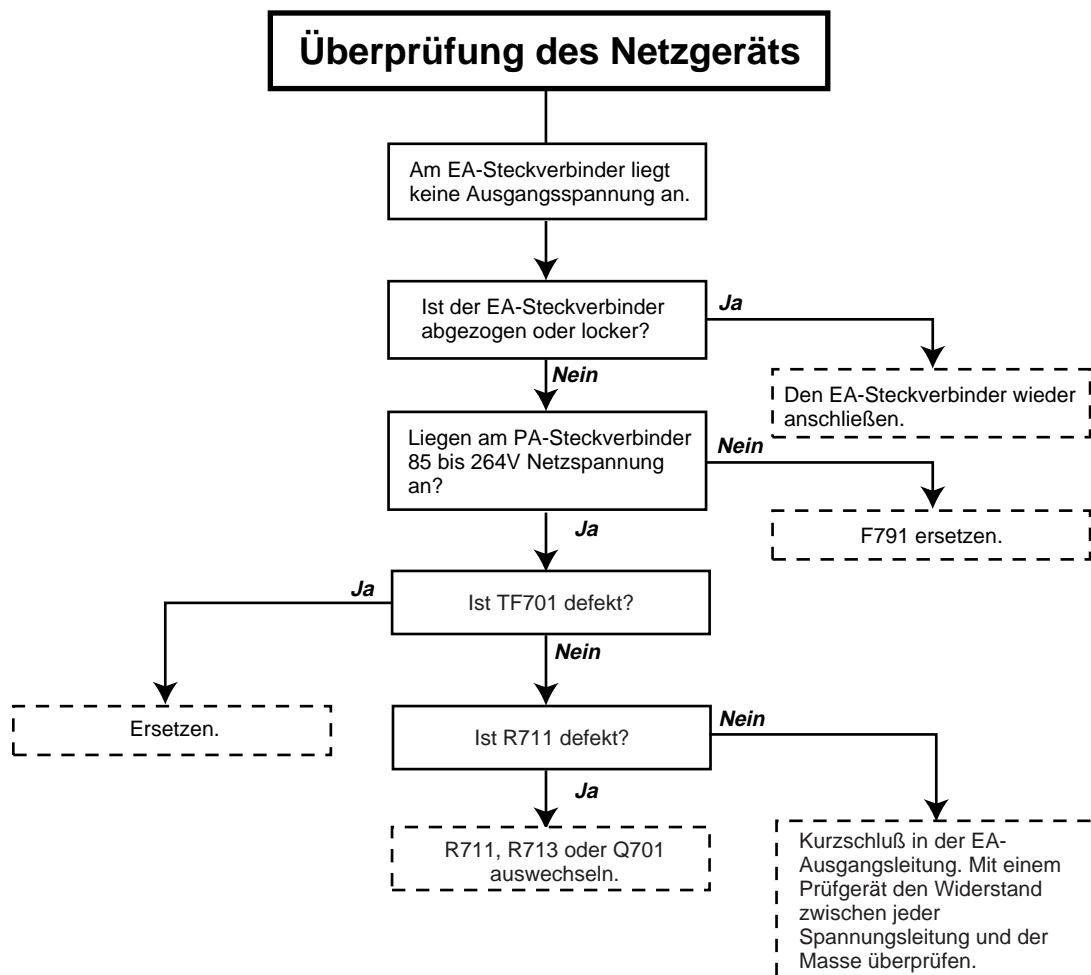
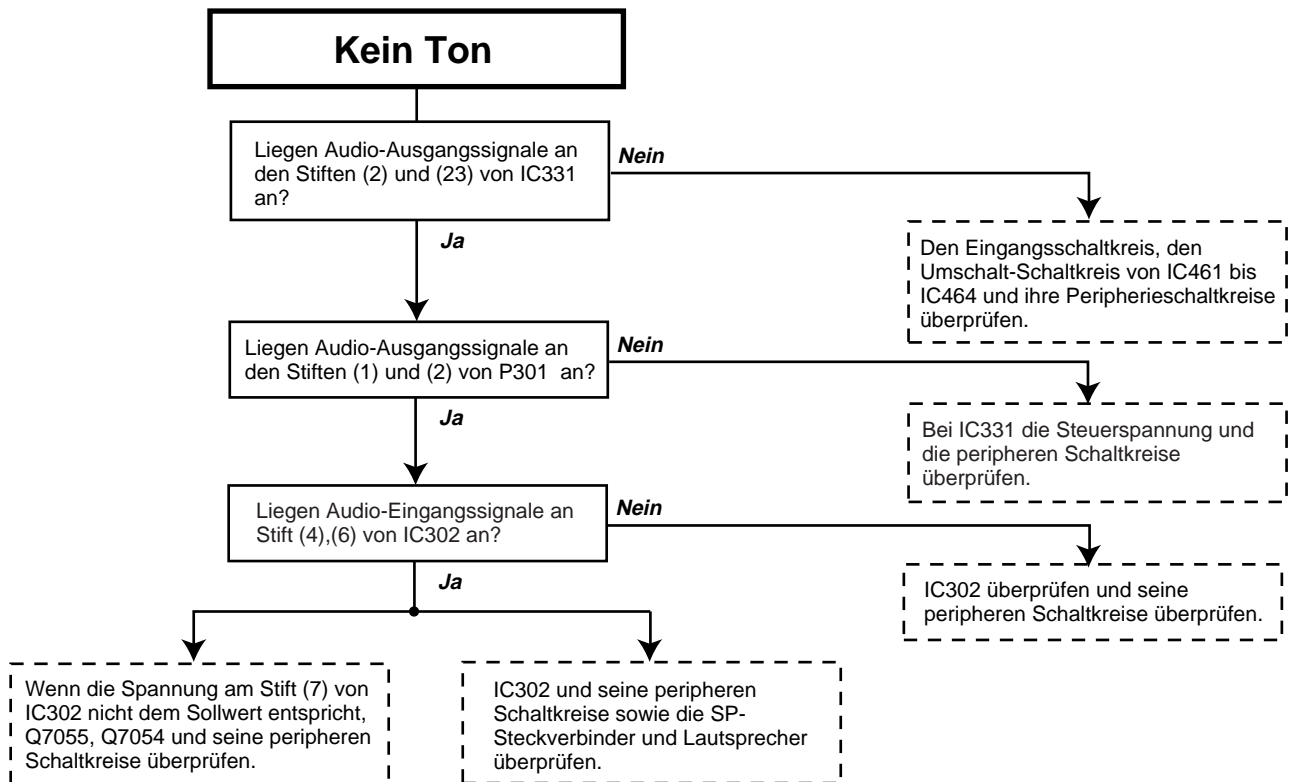
FEHLERSUCHTABELLE (Fortsetzung)



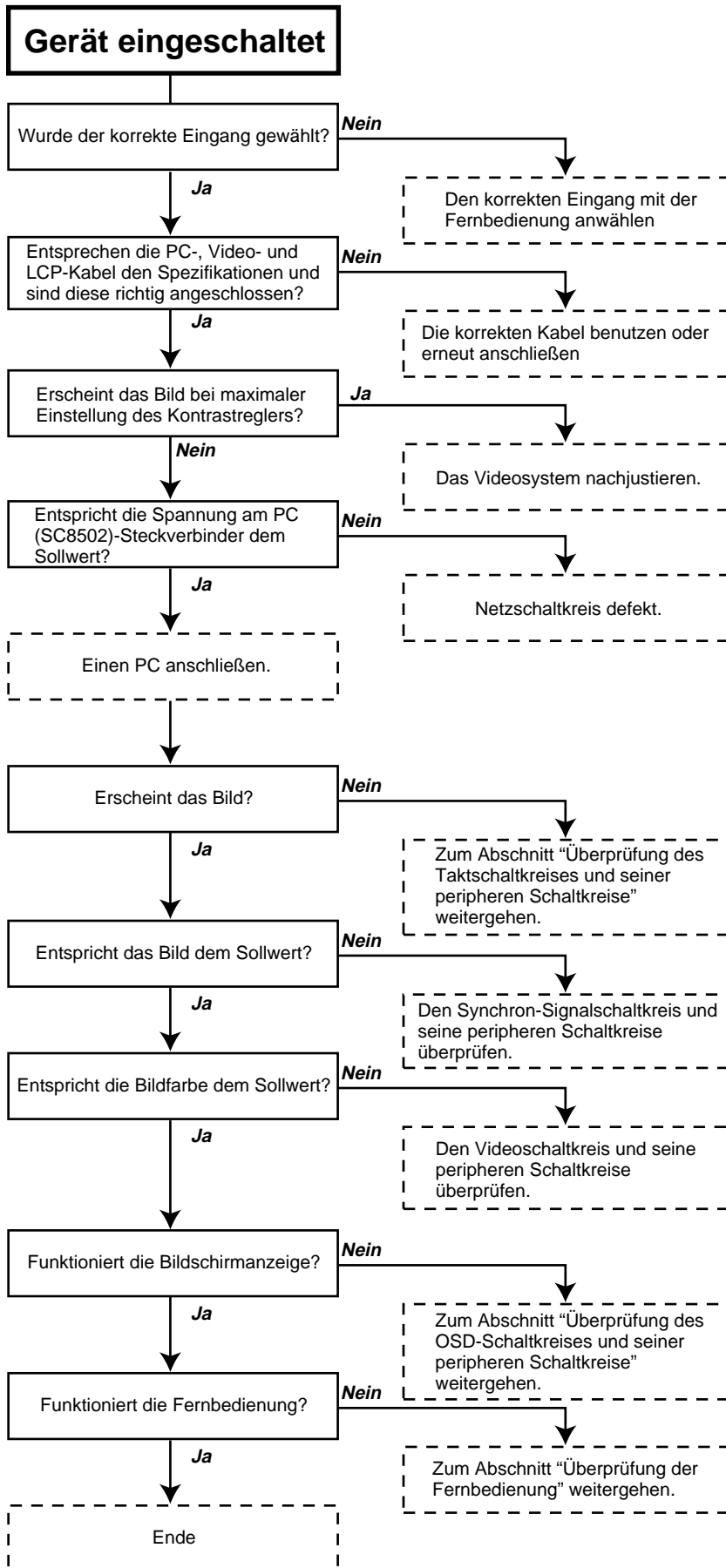
FEHLERSUCHTABELLE (Fortsetzung)



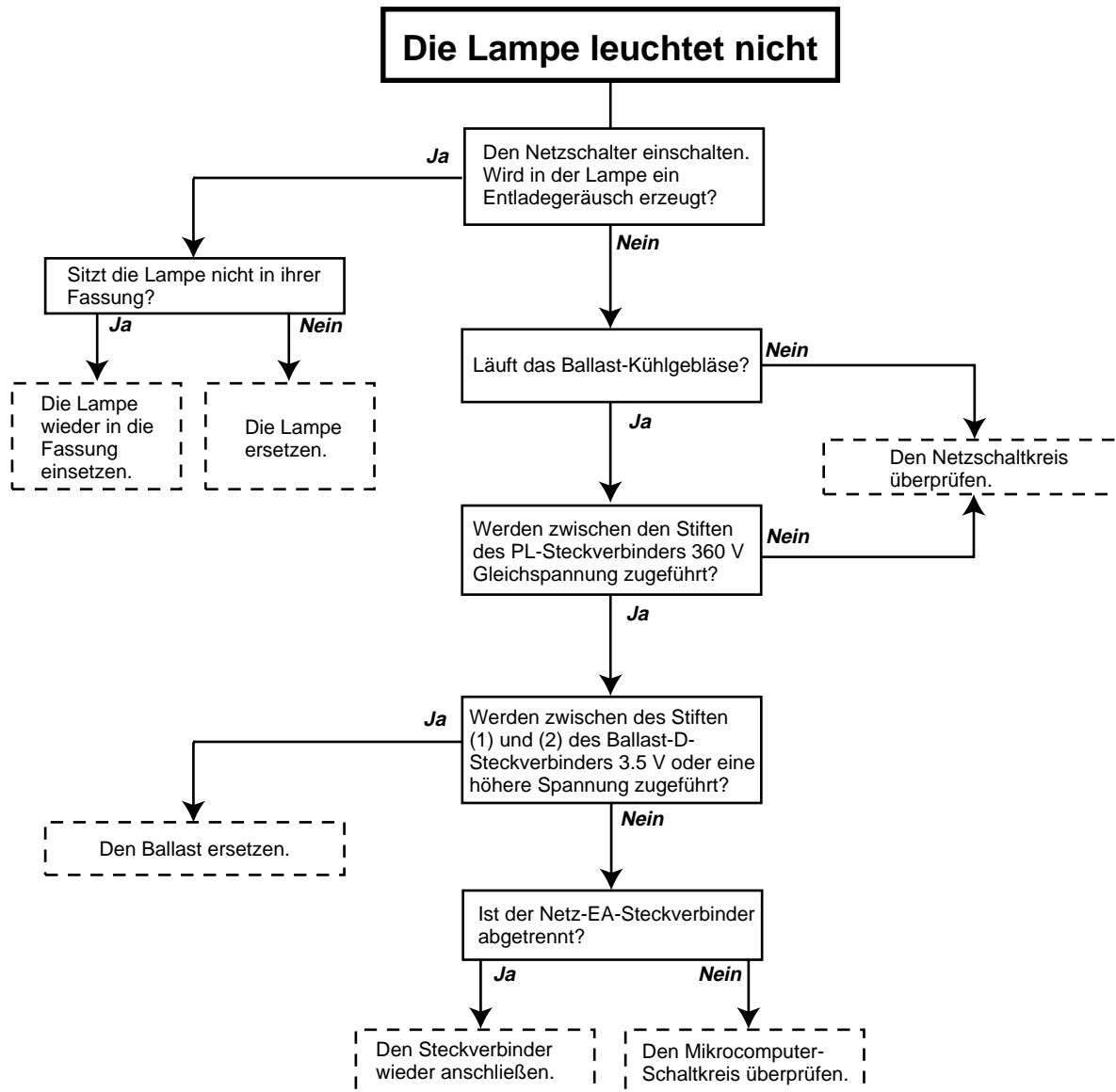
FEHLERSUCHTABELLE (Fortsetzung)



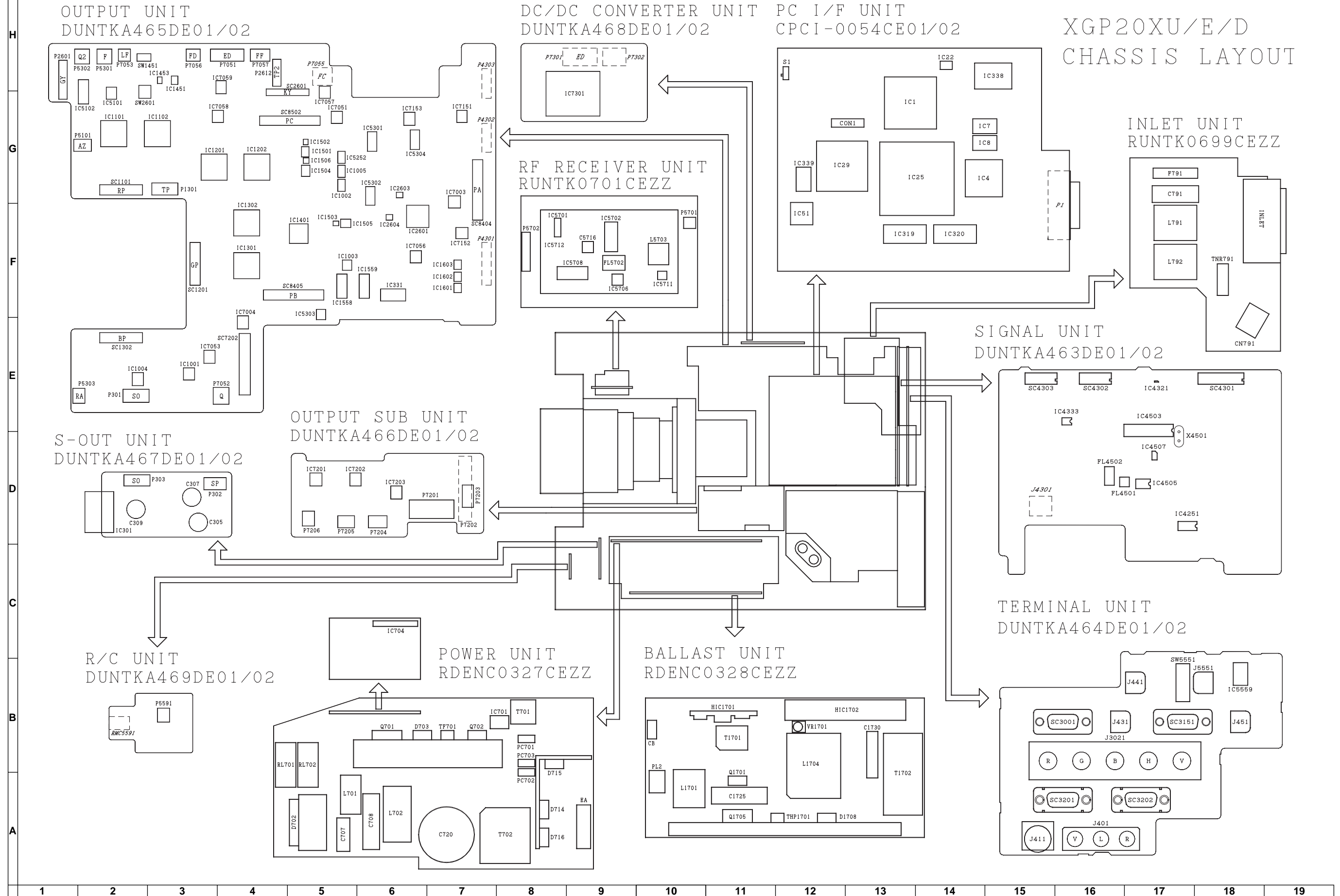
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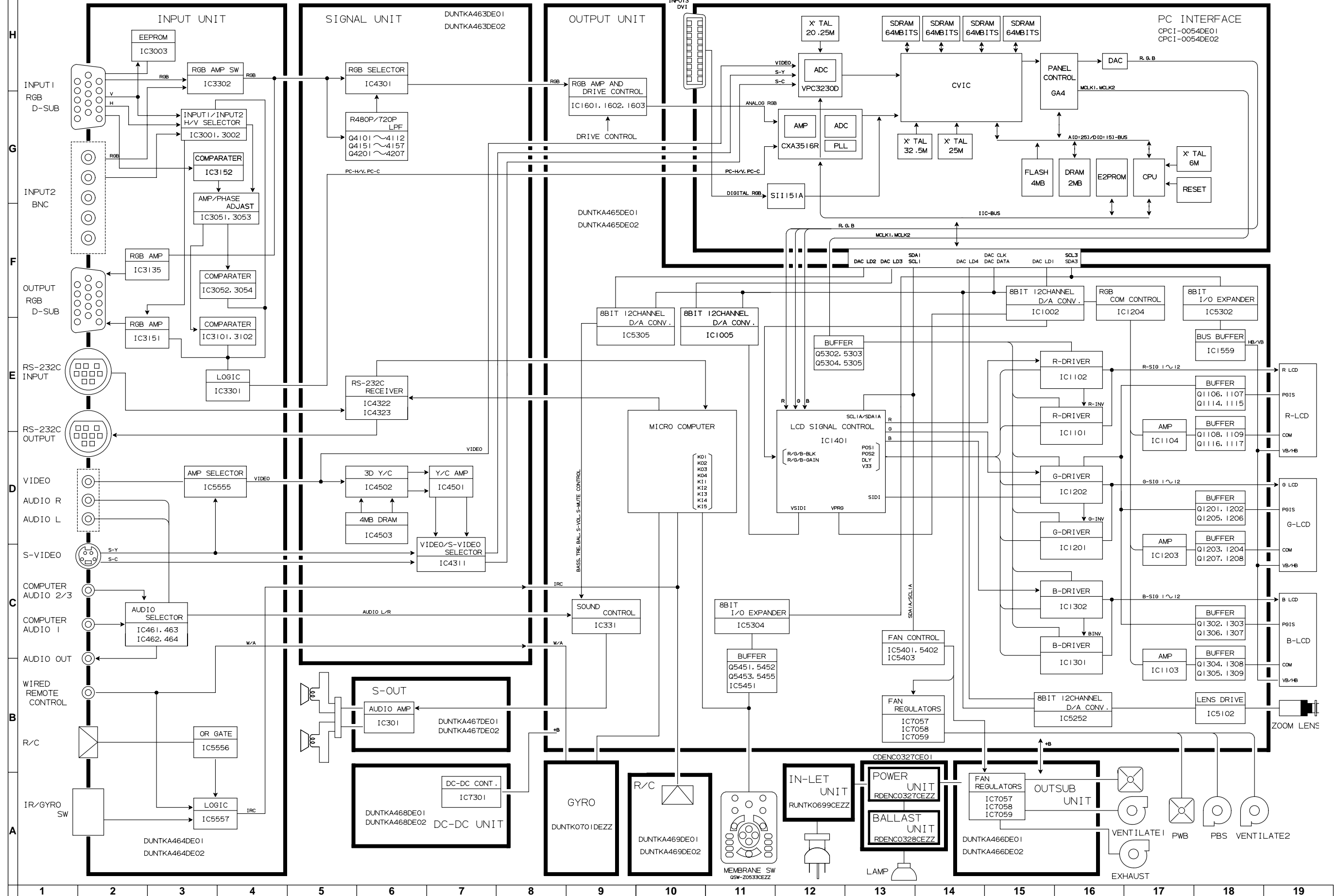
FEHLERSUCHTABELLE (Fortsetzung)



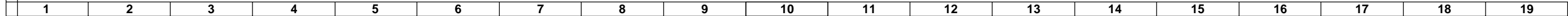
CHASSIS LAYOUT / CHASSIS-ANORDNUNG



BLOCK DIAGRAM / BLOCKSCHALTBIKD



	A	B	C	D	E	F	G	H
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DESCRIPTION OF SCHEMATIC DIAGRAM

VOLTAGE MEASUREMENT CONDITION:

1. Voltages at test points are measured at the supply voltage of AC 220V. Signals are fed by a color bar signal generator for servicing purpose and the above voltages are measured with a 20k ohm/V tester.

WAVEFORM MEASUREMENT CONDITION:

1. Waveforms at test points are observed at the supply voltage of AC 220V. Signals are fed by a color bar signal generator for servicing purpose.

INDICATION OF RESISTOR & CAPACITOR:

RESISTOR

1. The unit of resistance "Ω" is omitted. (K=kΩ=1000 Ω, M=MΩ).
2. All resistors are ± 5%, unless otherwise noted. (J= ± 5%, F= ± 1%, D= ± 0.5%)
3. All resistors are 1/10W, unless otherwise noted.
4. All resistors are Carbon type, unless otherwise noted.

©: Solid Ⓢ: Cement
Ⓢ: Oxide Film Ⓢ: Special
Ⓢ: Metal Coating

CAPACITOR

1. All capacitors are μF, unless otherwise noted. (P=pF=μμF).
2. All capacitors are 50V, unless otherwise noted.
3. All capacitors are Ceramic type, unless otherwise noted.

(ML): Mylar (TA): Tantalum
(PF): Polypro Film (ST): Styrol

CAUTION:

This circuit diagram is original one, therefore there may be a slight difference from yours.

SAFETY NOTES:

1. DISCONNECT THE AC PLUG FROM THE AC OUTLET BEFORE REPLACING PARTS.
2. SEMICONDUCTOR HEAT SINKS SHOULD BE REGARDED AS POTENTIAL SHOCK HAZARDS WHEN THE CHASSIS IS OPERATING.

IMPORTANT SAFETY NOTICE:

PARTS MARKED WITH "△" () ARE IMPORTANT FOR MAINTAINING THE SAFETY OF THE SET. BE SURE TO REPLACE THESE PARTS WITH SPECIFIED ONES FOR MAINTAINING THE SAFETY AND PERFORMANCE OF THE SET.

BESCHREIBUNG DES SCHEMATISCHEN SCHALTPLANS

SPANNUNGSMESSUNGEN:

1. Spannungen an den Prüfpunkten werden bei einer Netzspannung von 220V gemessen, Signale werden für die Wartung mit einem Farbbalken-Signal generator zugeführt, und Spannungen werden mit einem Meßinstrument (20 kΩ/V) ermittelt.

SIGNALFORMMESSUNGEN:

1. Die Wellenformen an den Testpunkten werden bei einer Netzspannung von 220V verfolgt. Signale werden für die Wartung mit einem Farbbalken-Signal generator zugeführt.

BEZEICHNUNG DES WIDERSTANDS UND KONDENSATORS:

WIDERSTAND

1. Die Widerstandseinheit "Ω" wird weggelassen. (K=kΩ=1000 Ω, M=MΩ)
2. Alle Widerstände haben ± 5%, sofern nicht anders angegeben. (J= ± 5%, F= ± 1%, D= ± 0.5%)
3. Alle Widerstände haben 1/10W, sofern nicht anders angegeben.
4. Alle Widerstände sind Kohletyp, sofern nicht anders angegeben.

©: Solid Ⓢ: Cement
Ⓢ: Oxide Film Ⓢ: Special
Ⓢ: Metal Coating

KONDENSATOR

1. Die Kapazitätseinheit ist μF, sofern nicht anders angegeben. (P=pF=μμF).
2. Alle Kondensatoren haben 50V, sofern nicht anders angegeben.
3. Alle Kondensatoren sind Keramiktyp, sofern nicht anders angegeben.

(ML): Mylar (TA): Tantal
(PF): Polyprofil (ST): Styrol

ACHTUNG:

Bei diesem Schaltplan handelt es sich um den ursprünglichen. Es können daher geringfügige Unterschiede zu dem Ihrem bestehen.

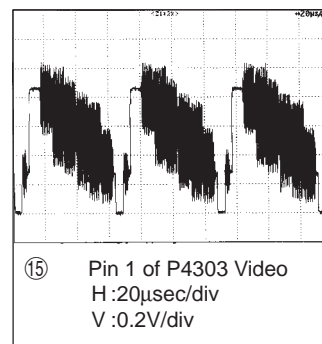
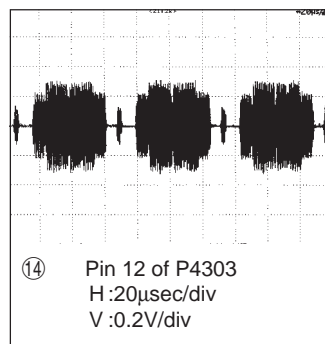
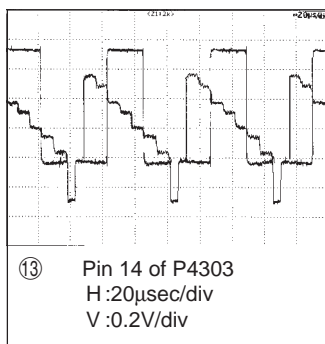
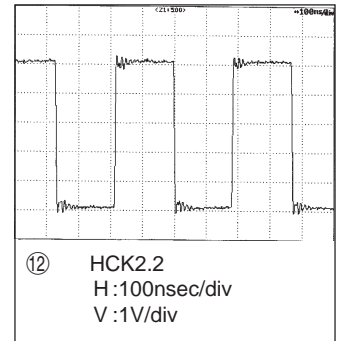
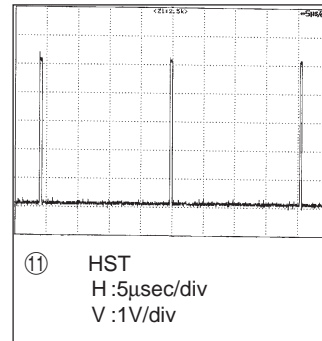
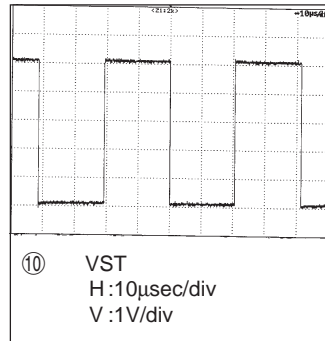
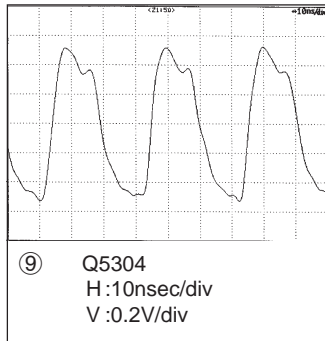
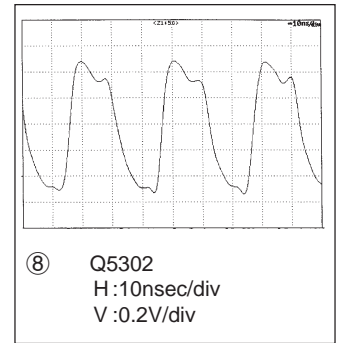
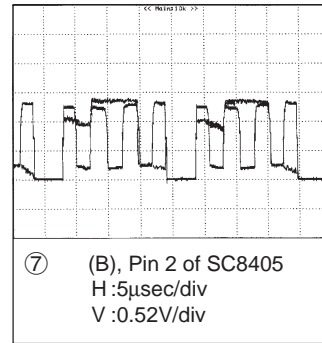
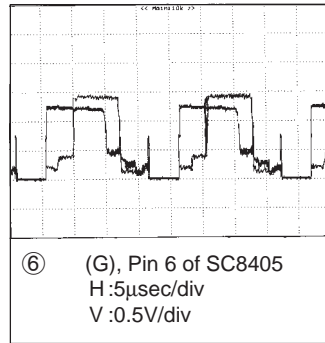
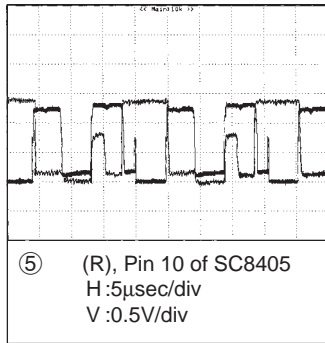
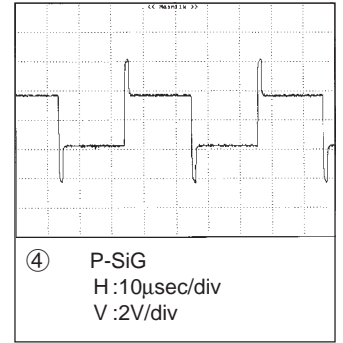
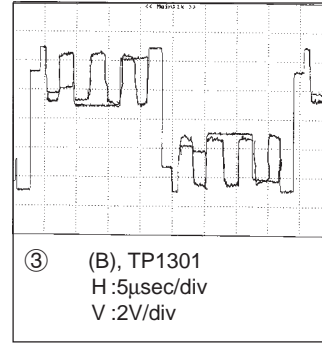
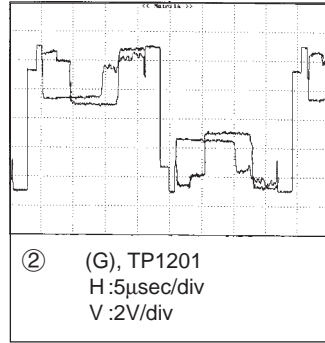
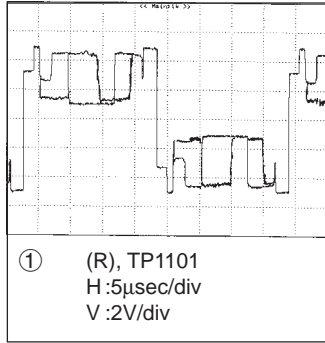
SICHERHEITSANMERKUNGEN:

1. VOR DEM AUSWECHSELN VON TEILEN MUSS UNBEDINGT NETZSTECKER AUS DER NETZSTECKDOSE GEZOGEN WERDEN.
2. DIE WARMEABLEITER DER HALBLEITER SOLLTEN BEIM BETRIEB DES CHASSIS ALS MÖGLICHE URSACHEN VON GEFÄHRlichen ELEKTRISCHEN SCHLÄGEN BETRACHTET WERDEN.

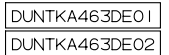
WICHTIGE SICHERHEITSANMERKUNGEN:

MIT "△" () BEZEICHNETEN TEILE SIND BESONDERS WICHTIG FÜR DIE AUFRECHTERHALTUNG DER SICHERHEIT. BEIM WECHSELN DER TEILE SOLLTEN DIE VORGESCHRIEBENEN TEILE IMMER VERWENDET WERDEN, UM SOWOHL DIE SICHERHEIT ALS AUCH DIE LEISTUNG DES GERÄTES AUFRECHTZUERHALTEN.

WAVEFORMS / WELLENFORMEN



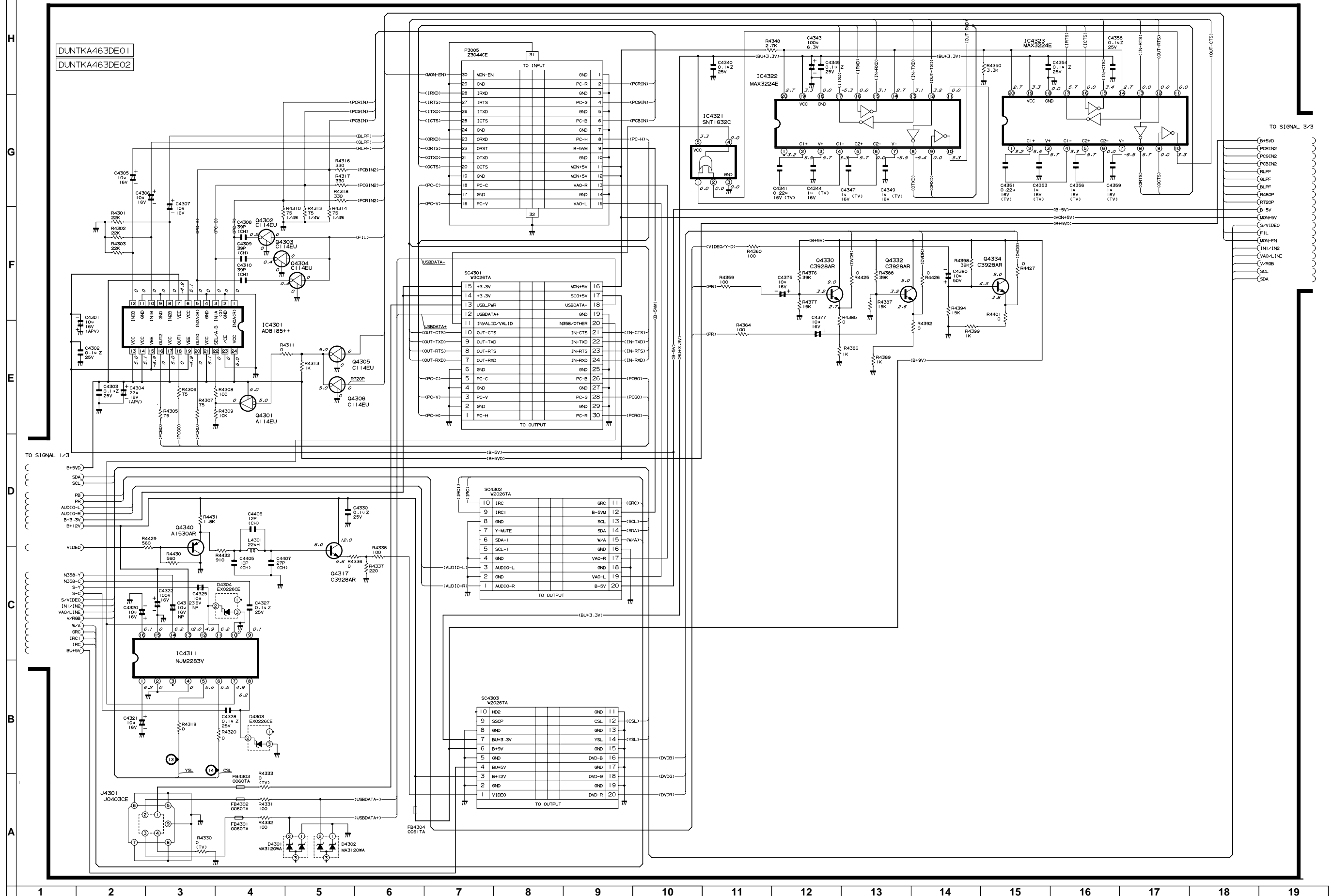
A



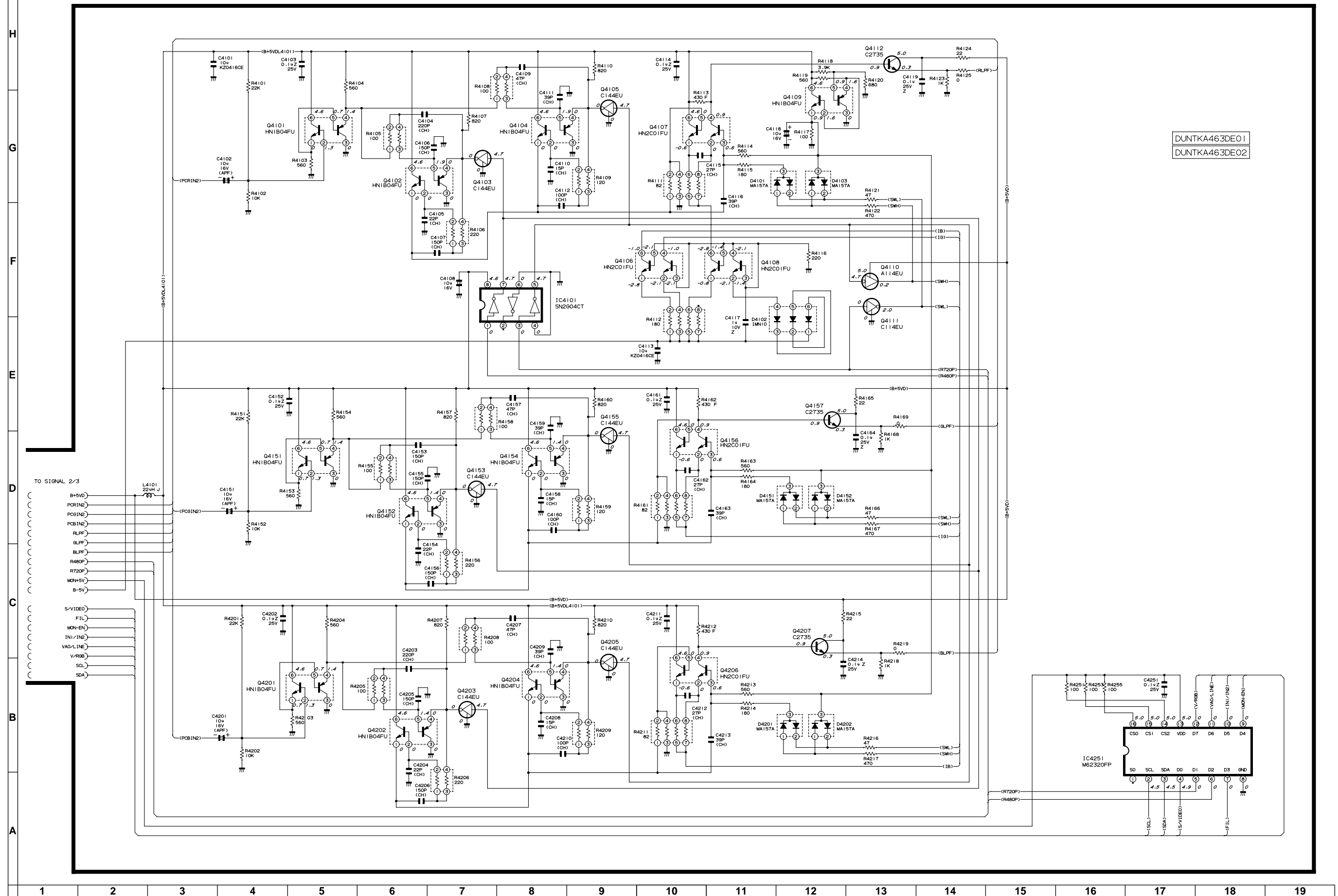
TO SIGNAL 2/3

(B+5VD
 (SDA
 (SCL
 (PB
 (PR
 (AUDIO-L
 (AUDIO-R
 (B+3.3V
 (B+12V
 (VIDEO
 (N358-Y
 (N358-C
 (S-Y
 (S-C
 (S/VIDEO
 (IN1/IN2
 (YAO/LINE
 (V/RGB
 (W/A
 (ORC
 (IRC1
 (IRC
 (B+5V

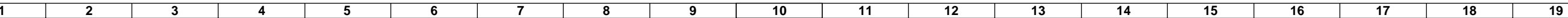
DUNTKA463DE01
DUNTKA463DE02



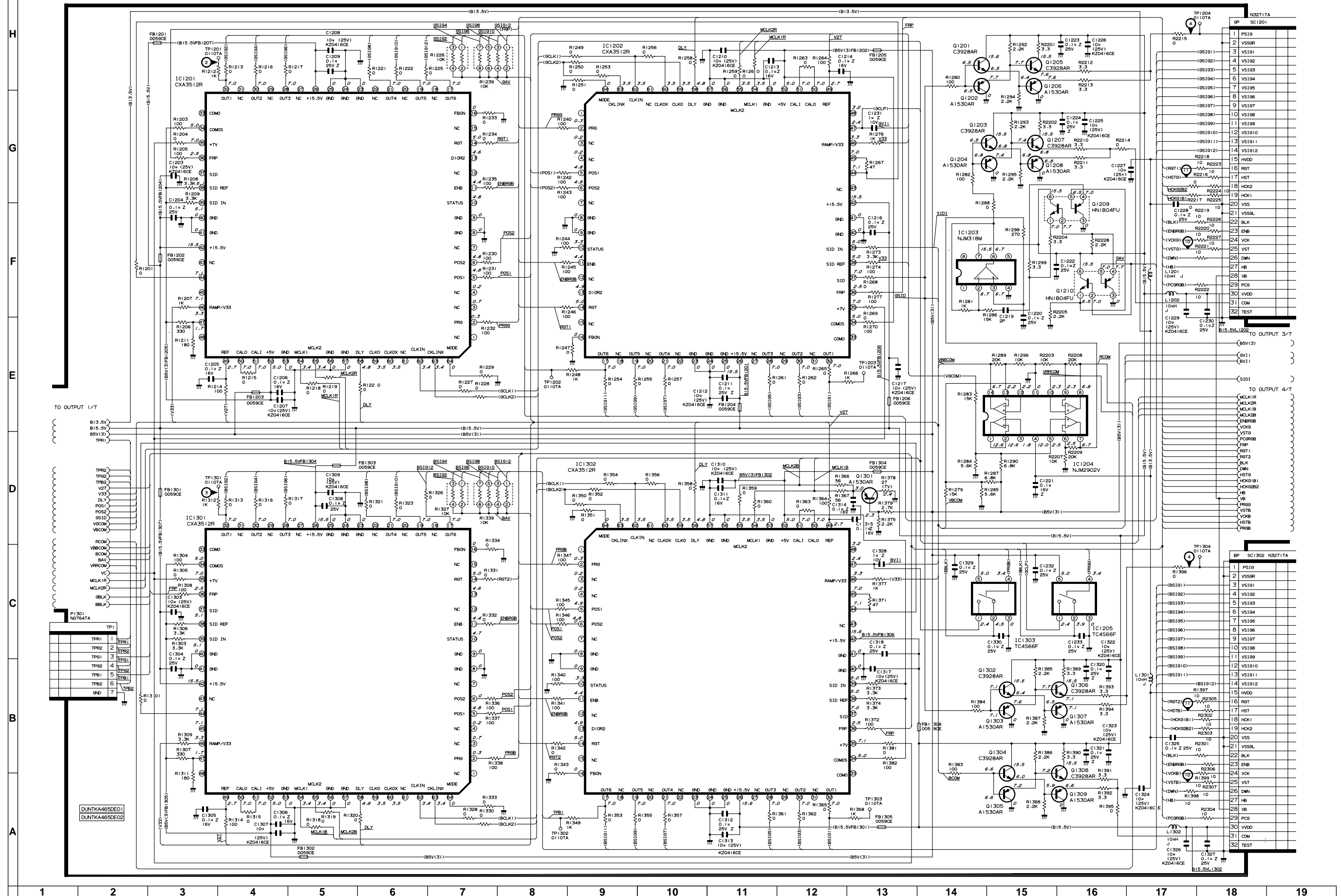
■ SIGNAL UNIT / SIGNALEINHEIT-3/3



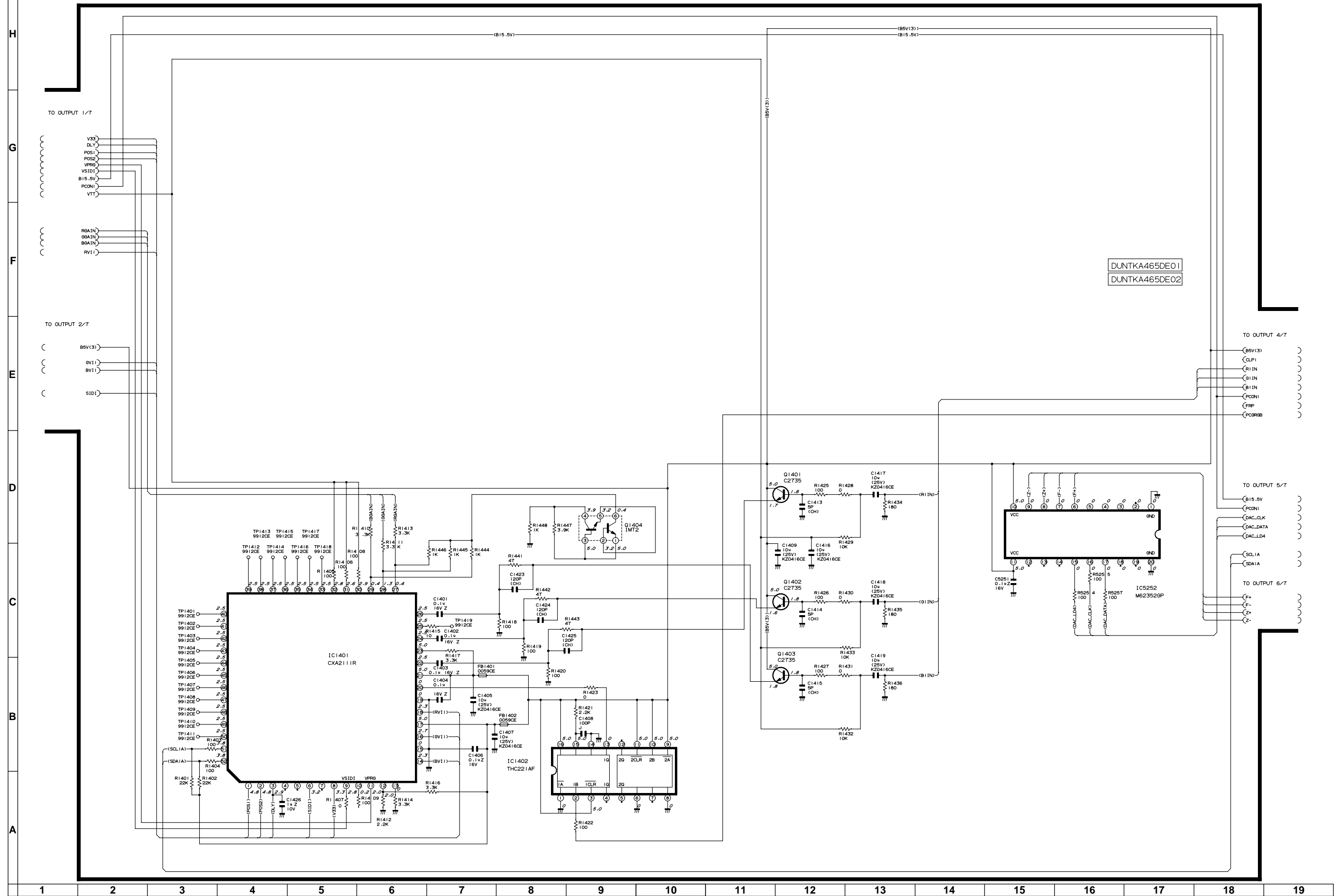
	A	B	C	D	E	F	G	H
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OUTPUT UNIT / AUSGANGSEINHEIT-2/7



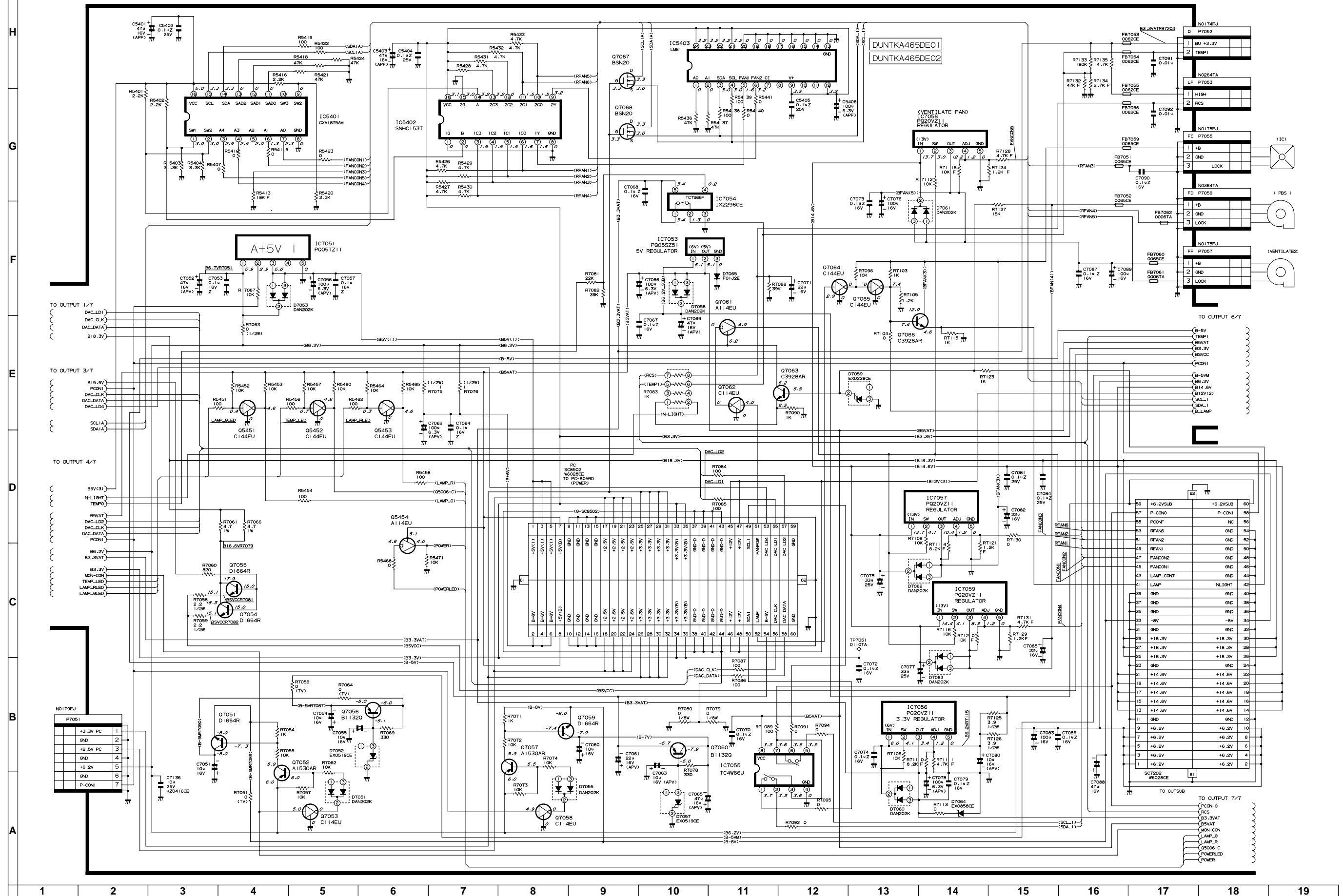
OUTPUT UNIT / AUSGANGSEINHEIT-3/7



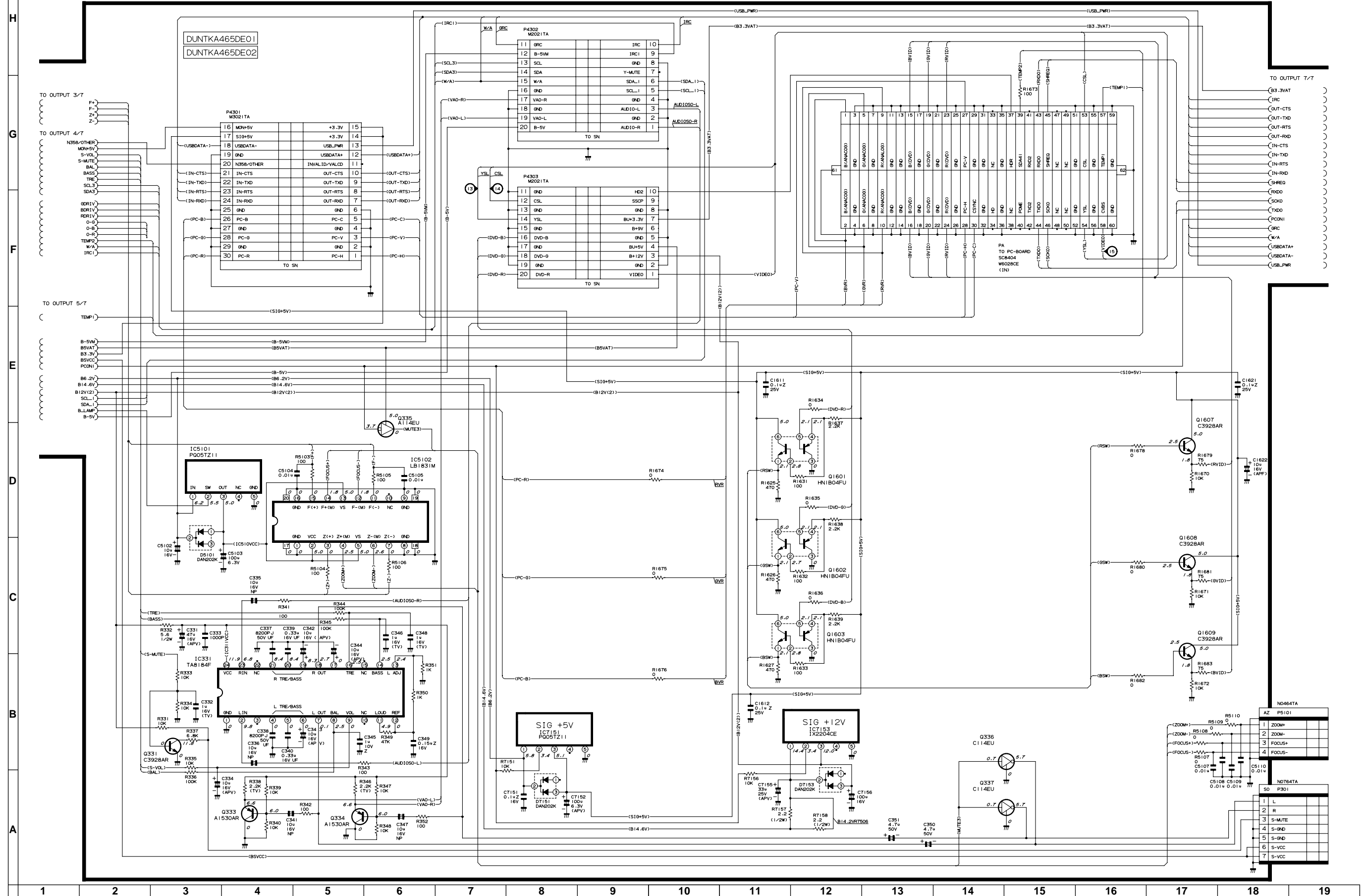
A



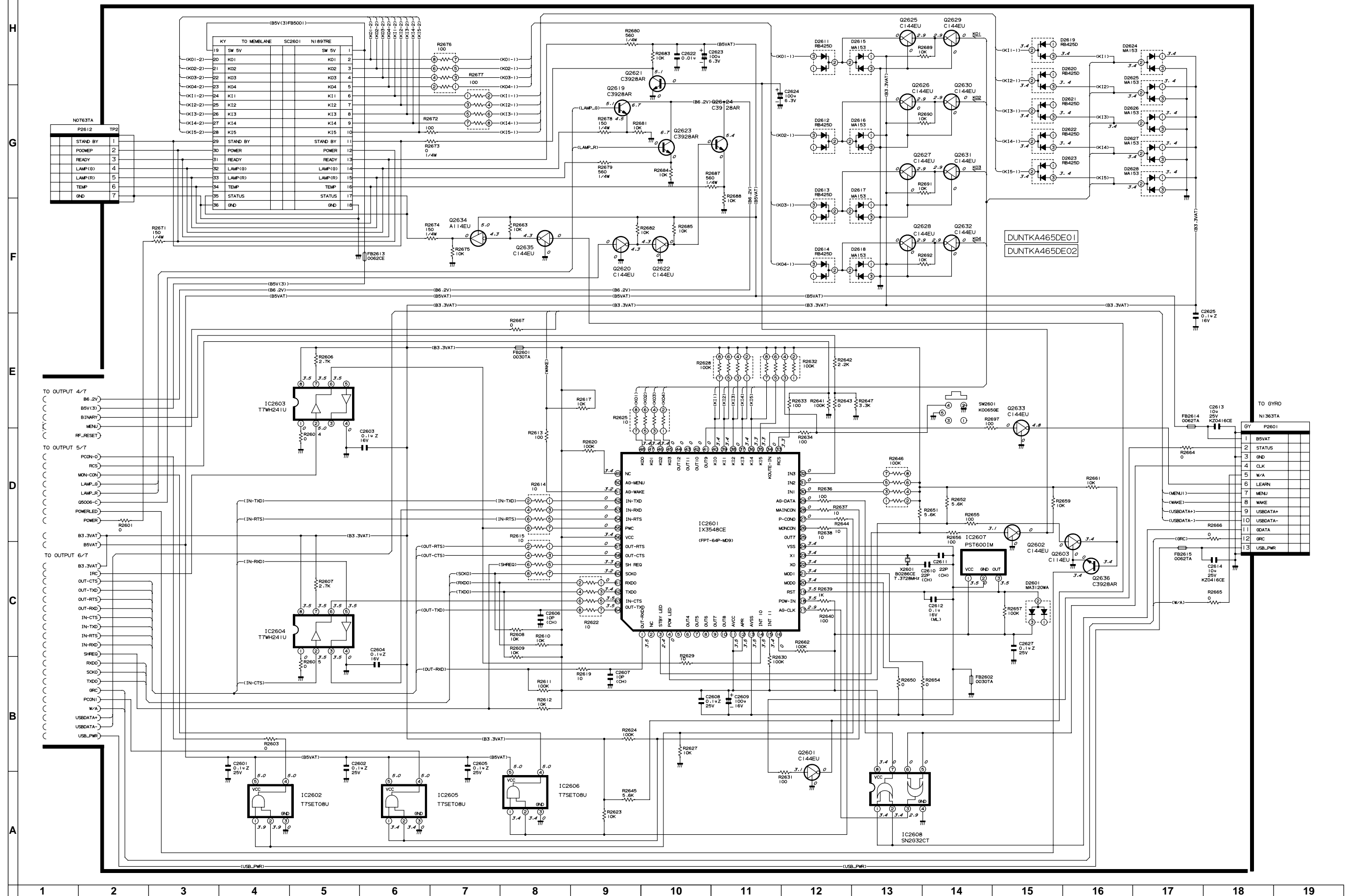
■ OUTPUT UNIT / AUSGANGSEINHEIT-5/7



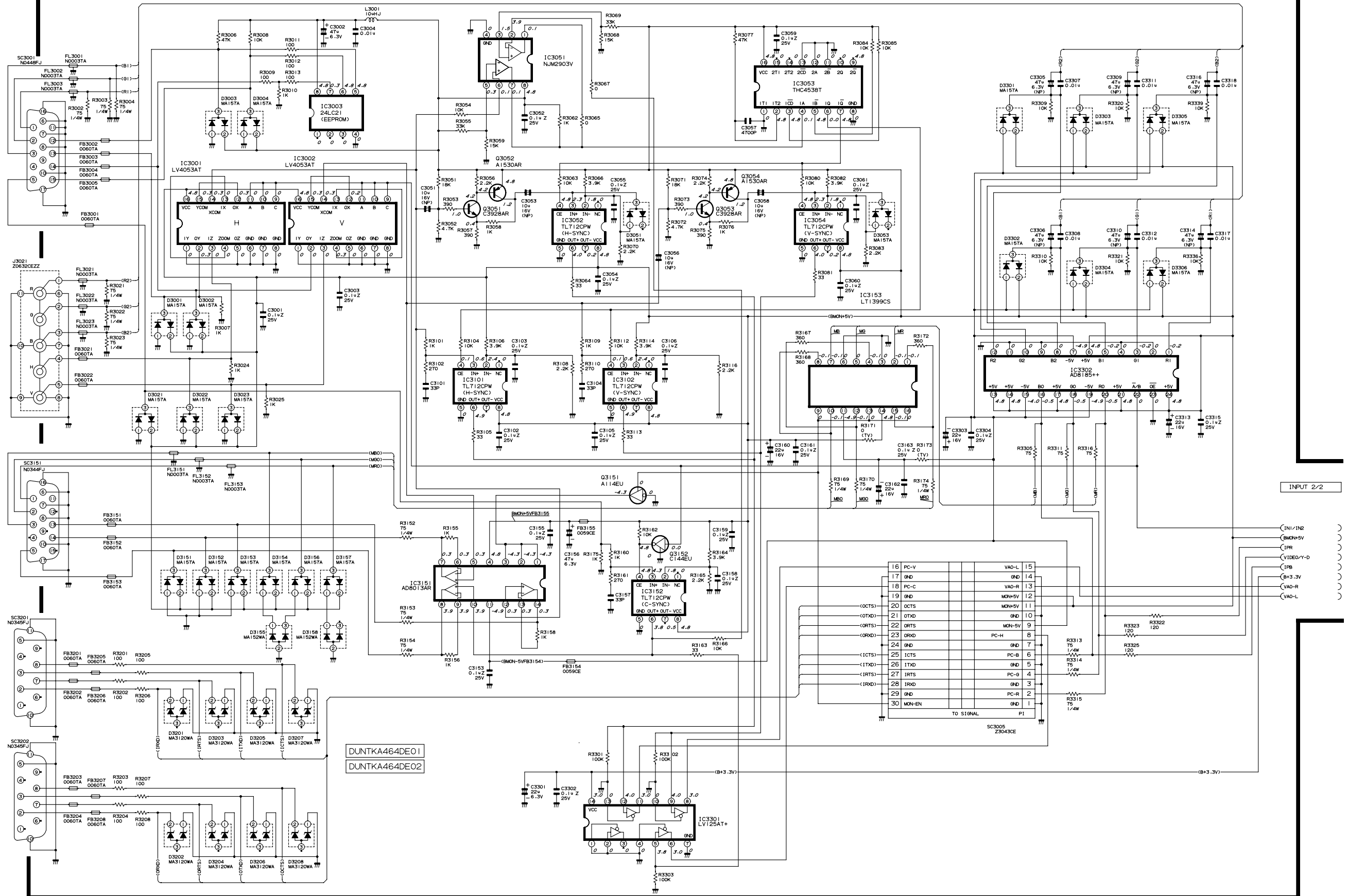
■ OUTPUT UNIT / AUSGANGSEINHEIT-6/7



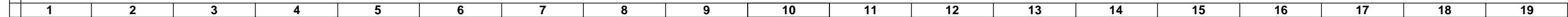
■ OUTPUT UNIT / AUSGANGSEINHEIT-7/7



INPUT 2/2



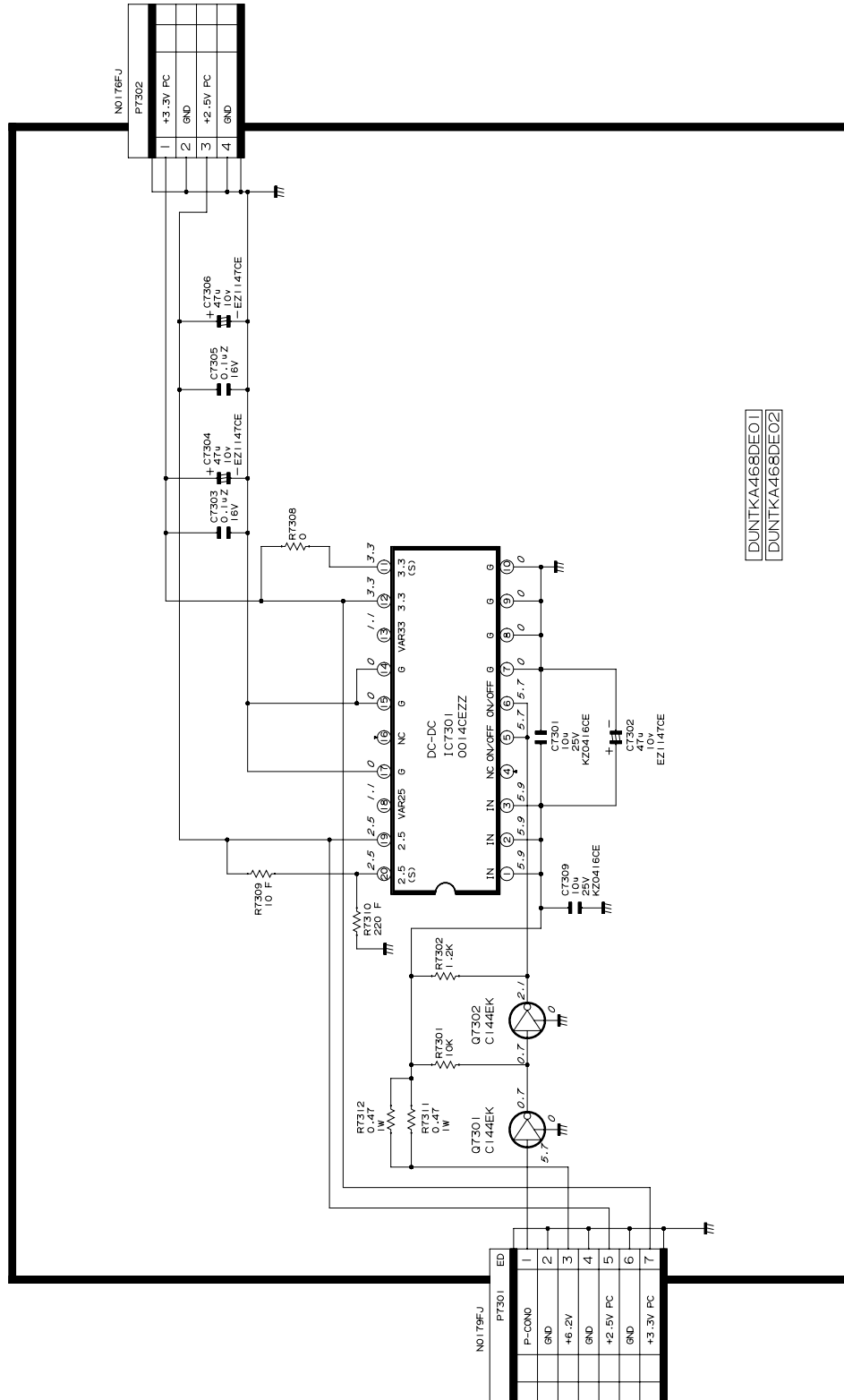
A
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D
E
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G
H





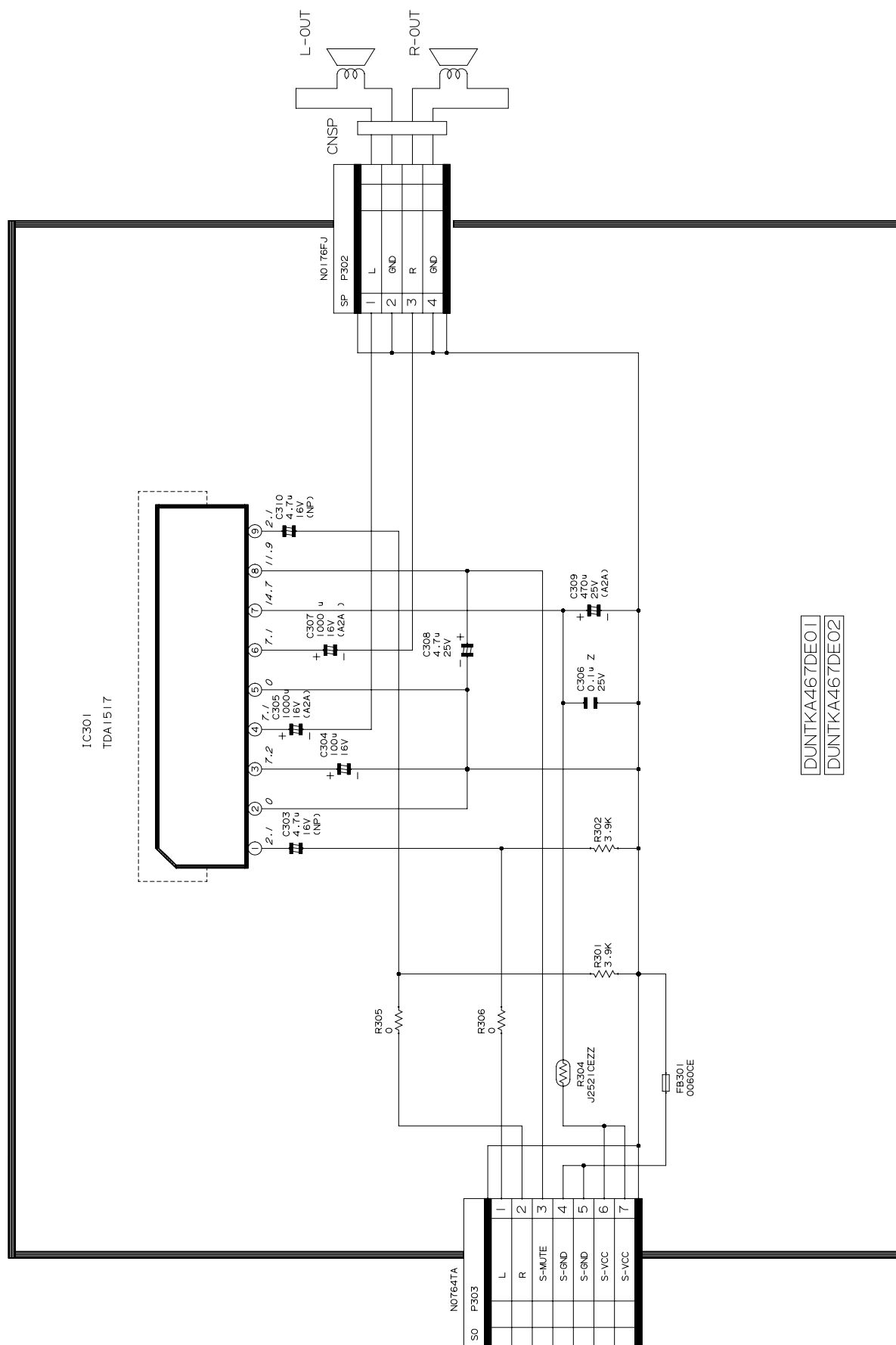
DC/DC CONVERTER UNIT / DC/DC-KONVERTERSEINHEIT

H
G
F
E
D
C
B
A



DUNTKA468DE01
DUNTKA468DE02

■ SOUND OUT UNIT / TONAUSGANGSEINHEIT



DUNTKA467DE01

DUNTKA467DE02

■ R/C RECEIVER UNIT / FERNBEDIENUNGSEINHEIT

H

G

F

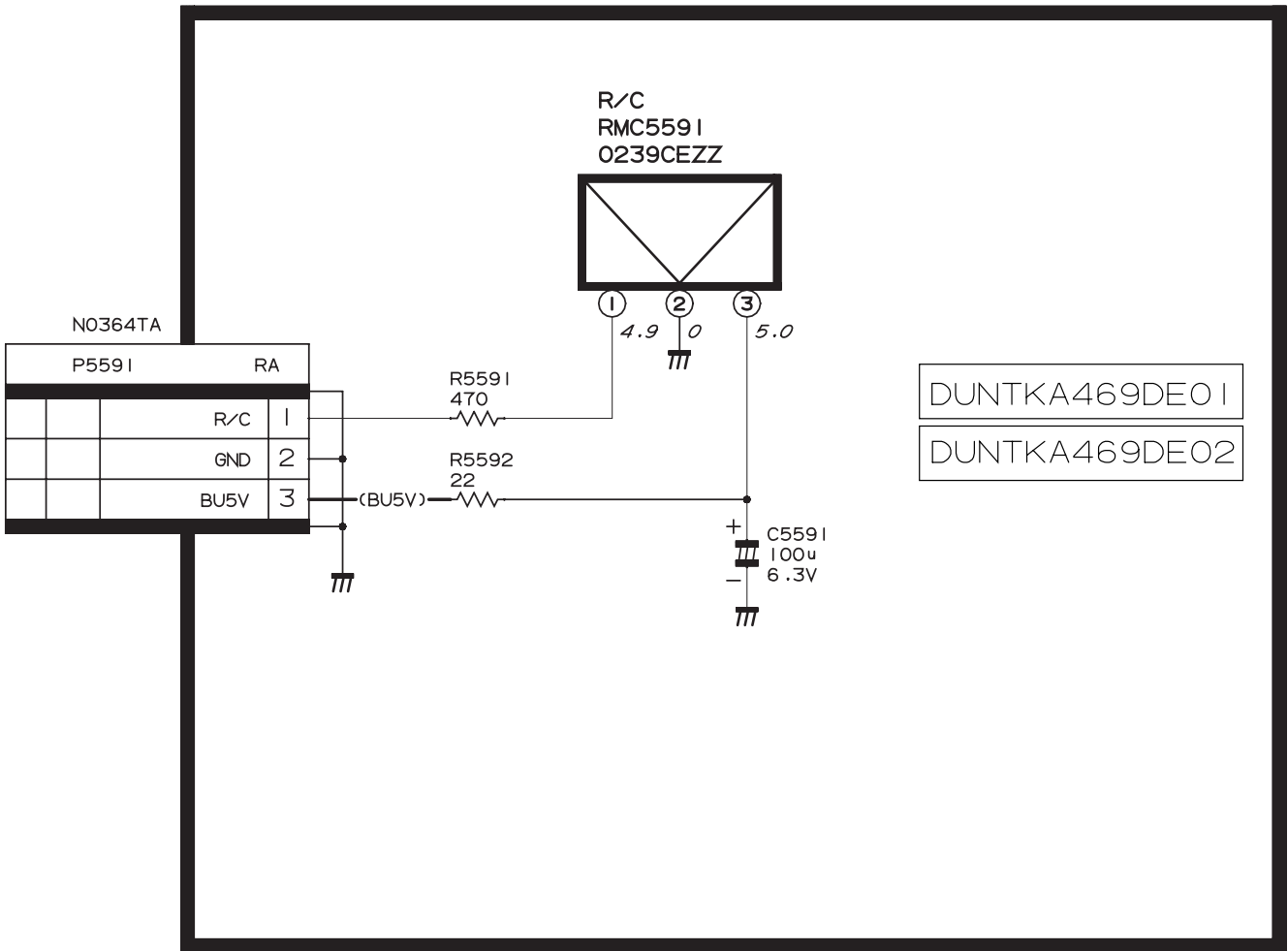
E

D

C

B

A



1

2

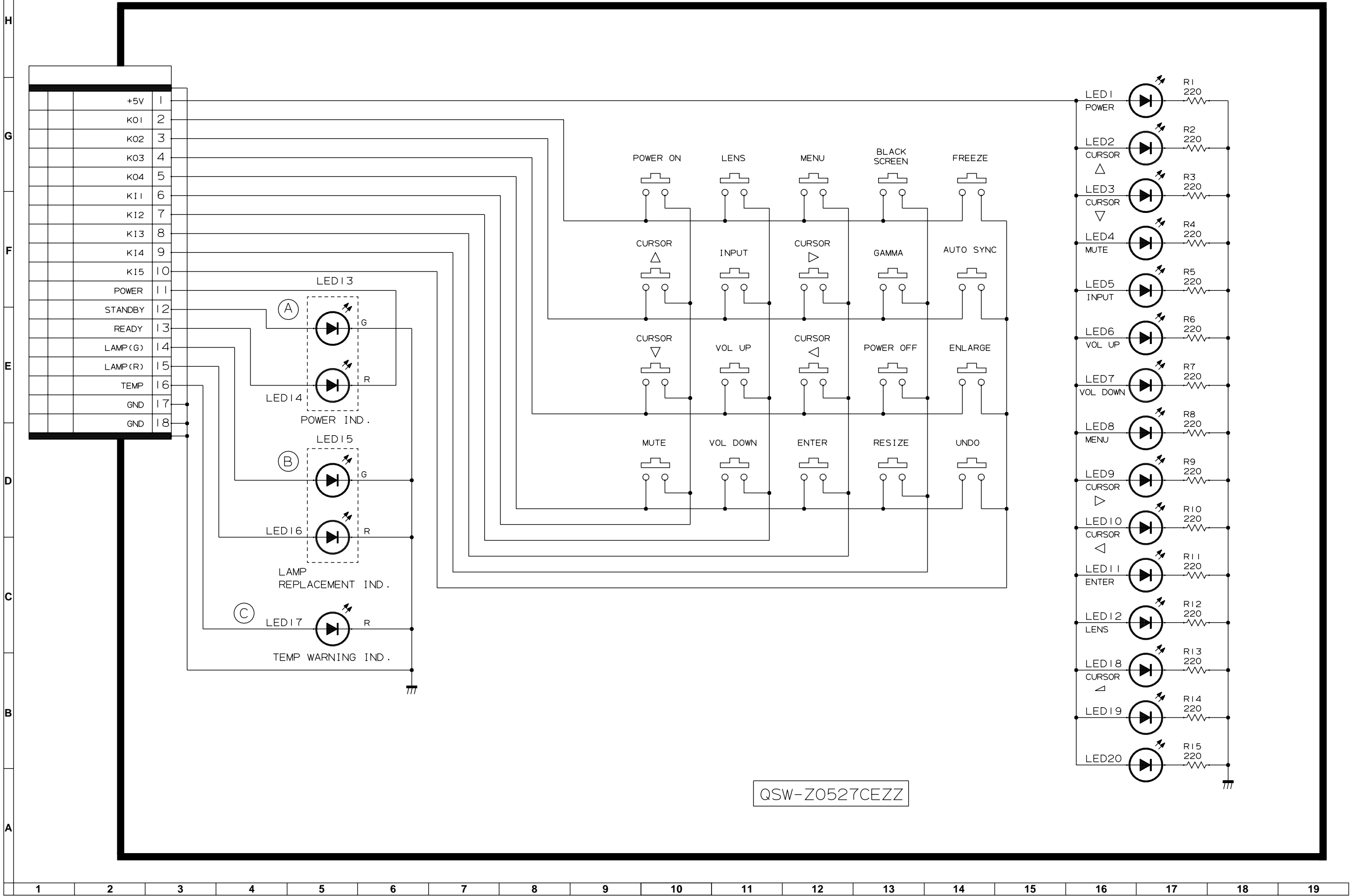
3

4

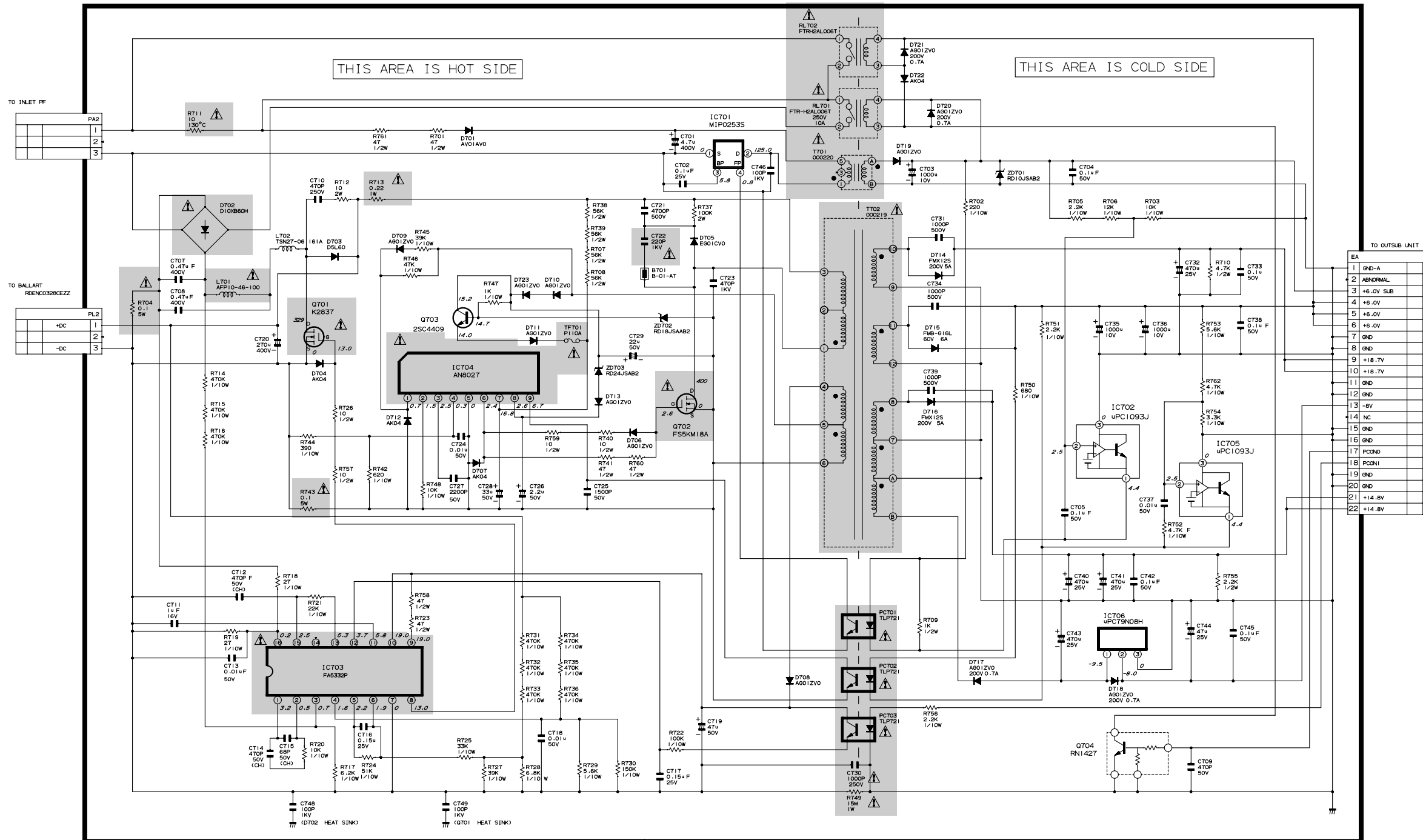
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6

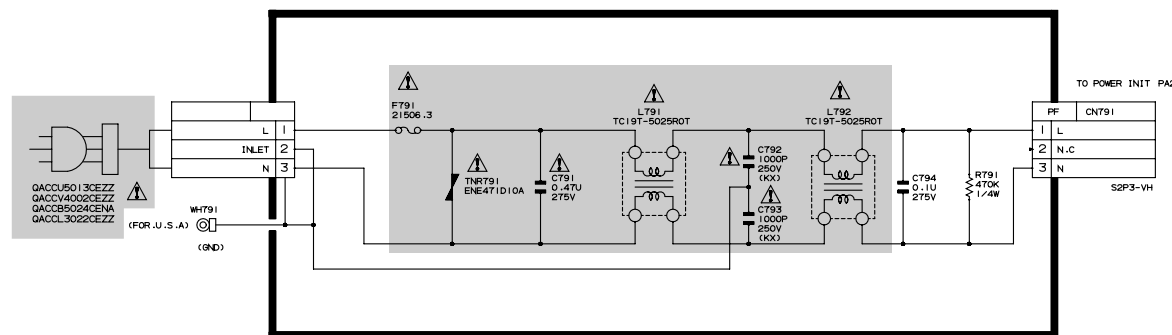
■ OPERATION KEY UNIT / BEDIENUNGSTASTENEINHEIT



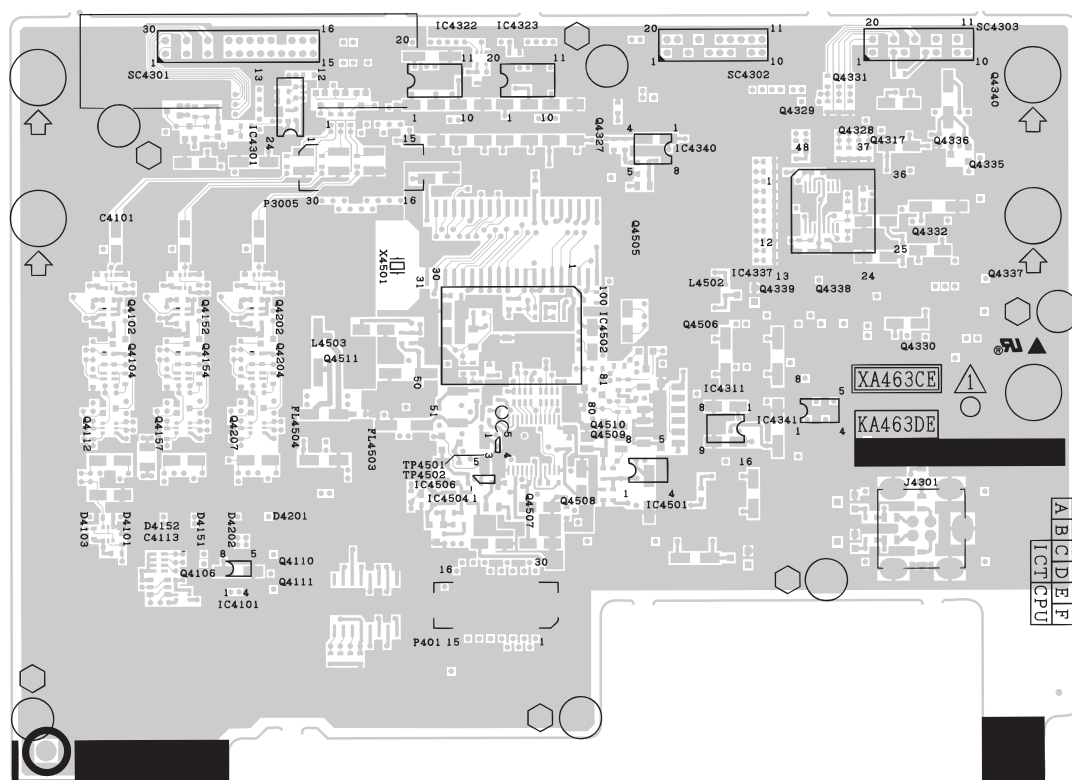
POWER / AC INLET UNIT NETZEINHEIT / NETZEINGANGSEINHEIT



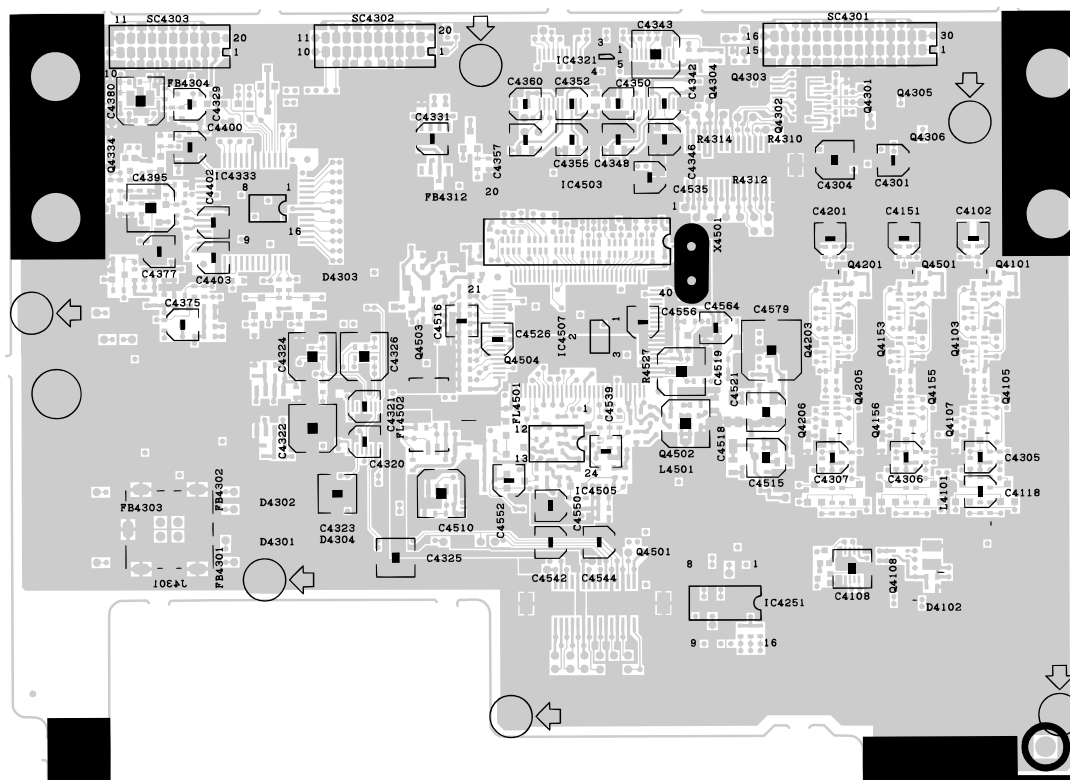
INLET UNIT RDENC0699CEZZ



PRINTED WIRING BOARD ASSEMBLIES/ LEITERPLATTENEINHEITEN



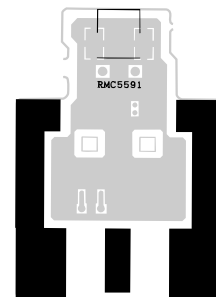
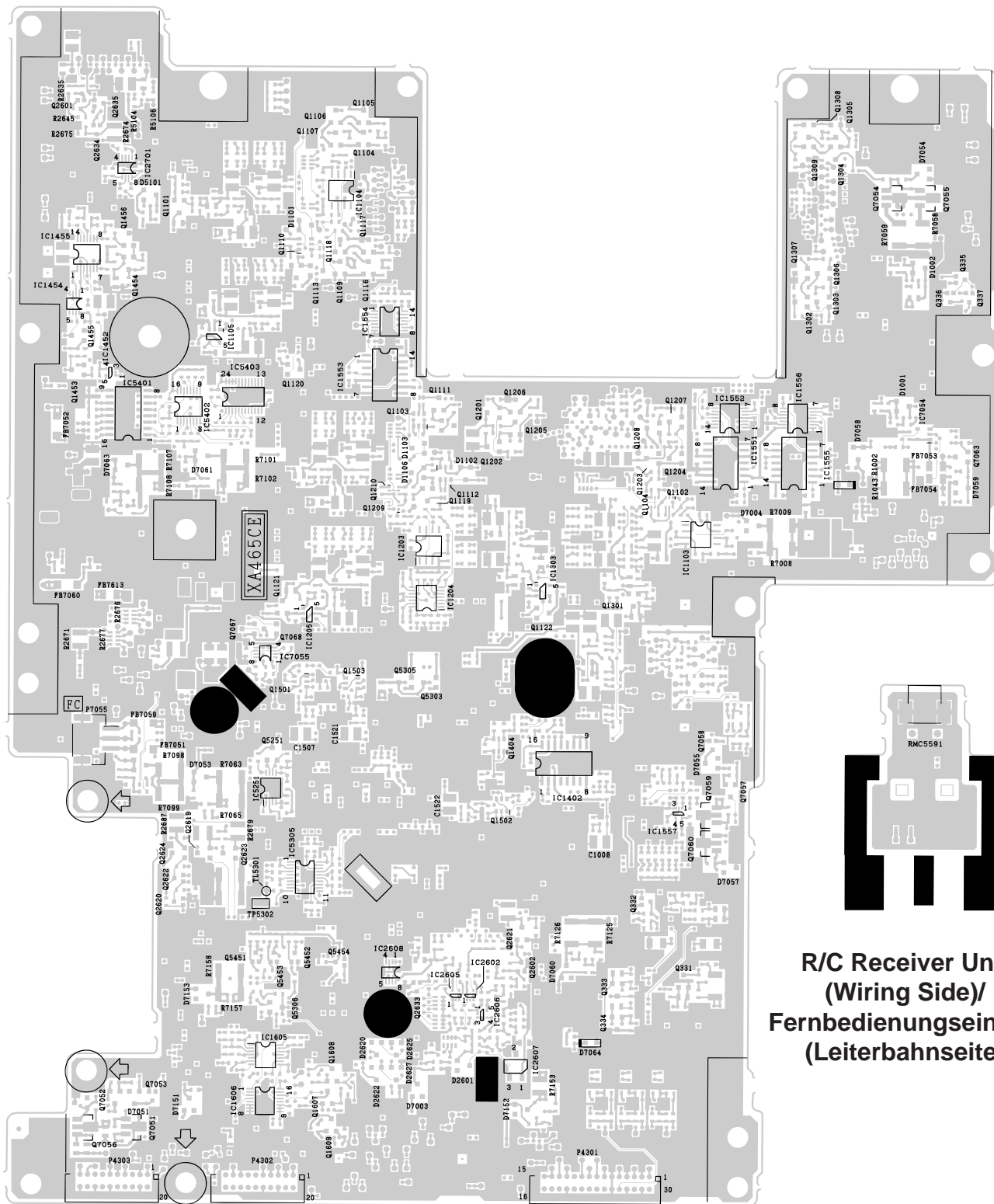
**Signal Unit (Wiring Side)/
Signaleinheit (Leiterbahnseite)**



**Signal Unit (Component Side)/
Signaleinheit (Bestückungsseite)**



H
G
F
E
D
C
B
A



R/C Receiver Unit
(Wiring Side)/
Fernbedienungseinheit
(Leiterbahnseite)

Output Unit (Wiring Side)/
Ausgangeinheit (Leiterbahnseite)

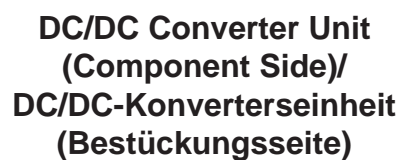
1	2	3	4	5	6
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**Output Sub Unit (Wiring Side)/
Ausgangs-Hilfseinheit(Leiterbahnseite)**

**Power Sub Unit (Wiring Side)/
Netz-Hilfseinheit (Leiterbahnseite)**

**Sound Out Unit (Wiring Side)/
Tonausgangseinheit (Leiterbahnseite)**

Power Unit (Wiring Side)/ Netzeinheit (Leiterbahnseite)



PARTS LIST

PARTS REPLACEMENT

Parts marked with "△" are important for maintaining the safety of the set. Be sure to replace these parts with specified ones for maintaining the safety and performance of the set.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

- | | |
|-----------------|----------------|
| 1. MODEL NUMBER | 2. REF. NO. |
| 3. PART NO. | 4. DESCRIPTION |
| 5. CODE | 6. QUANTITY |

in **USA**: Contact your nearest SHARP Parts Distributor.
For location of SHARP Parts Distributor,
Please call Toll-Free; 1-800-BE-SHARP

in **CANADA**: Contact SHARP Electronics of Canada Limited
Phone (416) 890-2100.

★ MARK: SPARE PARTS-DELIVERY SECTION

Ref. No.	Part No.	★	Description	Code
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LCD PANELS

NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

RLCDP0129CEZZ	J	LCD Module Unit, Red	DL
RLCDP0130CEZZ	J	LCD Module Unit, Green	DL
RLCDP0131CEZZ	J	LCD Module Unit, Blue	DL

PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

XG-P20XU

DUNTKA463DE01	—	Signal Unit	—
DUNTKA464DE01	—	Input Unit	—
DUNTKA465DE01	—	Output Unit	—
DUNTKA466DE01	—	Output Sub Unit	—
DUNTKA467DE01	—	Sound Out Unit	—
DUNTKA468DE01	—	DC/DC Converter Unit	—
DUNTKA469DE01	—	R/C Receiver Unit	—
RUNTK0699CEZZ	—	AC Inlet Unit	—
RDENC0327CEZZ	—	Power Unit	—
RUNTK0701CEZZ	J	GYRO Unit (Unit Replacement Item)	BR
RDENC0328CEZZ	J	Ballast Unit (Unit Replacement Item)	CB
CPCi-0054CE01	J	PC I/F Unit (Unit Replacement Item)	**

XG-P20XE/XD

DUNTKA463DE02	—	Signal Unit	—
DUNTKA464DE02	—	Input Unit	—
DUNTKA465DE02	—	Output Unit	—
DUNTKA466DE02	—	Output Sub Unit	—
DUNTKA467DE02	—	Sound Out Unit	—
DUNTKA468DE02	—	DC/DC Converter Unit	—
DUNTKA469DE02	—	R/C Receiver Unit	—
RUNTK0699CEZZ	—	AC Inlet Unit	—
RDENC0327CEZZ	—	Power Unit	—
RUNTK0701CEZZ	J	GYRO Unit (Unit Replacement Item)	BR
RDENC0328CEZZ	J	Ballast Unit (Unit Replacement Item)	CB
CPCi-0054CE02	J	PC I/F Unit (Unit Replacement Item)	**

ERSATZTEILLISTE

AUSTAUSCH VON TEILEN

Ersatzteile, die besondere Sicherheitseigenschaften haben, sind in dieser Anleitung markiert. Elektrische Komponenten mit solchen Eigenschaften sind in den Ersatzteil durch "△" gekennzeichnet. Der Gebrauch von Ersatzteilen, die nicht denselben Sicherheitseigenschaften haben wie die vom Hersteller empfohlenen und in der Bedienungsanleitung angegebenen, können zur Ursache von Blitzeinschlägen, Bränden und anderen Gefahren werden.

"WIE MAN ERSATZTEILE BESTELLT"

Damit Ihre Bestellung prompt und korrekt ausgeführt wird, geben Sie bitte folgende Informationen.

- | | |
|-------------------|-----------------|
| 1. MODELL NR. | 2. REF. NR. |
| 3. ERSATZTEIL NR. | 4. BESCHREIBUNG |
| 5. KODE | 6. QUANTITÄT |

★ MARKIERUNG : ERSATZTEILE-LIEFERUNG

Ref. No.	Part No.	★	Description	Code
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DUNTKA463DE01/02 SIGNAL UNIT

INTEGRATED CIRCUITS

IC4101	VHiSN2G04CT-1	J	SN74AHC2G04HDC	AE
IC4251	VHiM62320FP-1	J	M62320FP	AK
IC4301	VHiAD8185+-1	J	AD8185ARU	AW
IC4311	VHiNJM2283V-1	J	NJM2283V	AG
IC4321	VHiSNT1G32C-1	J	SN74AHC1G32DC	AD
IC4322	VHiMAX3224E-1	J	MAX3224ECAP	AU
IC4323	VHiMAX3224E-1	J	MAX3224ECAP	AU
IC4501	VHiTK15420/-1	J	TK15420MTI	AG
IC4502	VHiPD64082/-1	J	UPD64082GF-3BA	BC
IC4503	RH-iX3420CEZZ	J	MSM5416258B-28	AT
IC4507	VHiPST600iM-1	J	IC-PST600iMT	AE

TRANSISTORS

Q4101	VSHN1B04FU/-1	J	HN1B04FU	AC
Q4102	VSHN1B04FU/-1	J	HN1B04FU	AC
Q4103	VSDTC144EU/-1	J	DTC144EU	AB
Q4104	VSHN1B04FU/-1	J	HN1B04FU	AC
Q4105	VSDTC144EU/-1	J	DTC144EU	AB
Q4106	VSHN2C01FU/-1	J	HN2C01FU	AC
Q4107	VSHN2C01FU/-1	J	HN2C01FU	AC
Q4108	VSHN2C01FU/-1	J	HN2C01FU	AC
Q4109	VSHN1B04FU/-1	J	HN1B04FU	AC
Q4110	VSDTA114EU/-1	J	DTA114EU	AB
Q4111	VSDTC114EU/-1	J	DTC114EU	AB
Q4112	VS2SC2735/-1	J	2SC2735	AB
Q4151	VSHN1B04FU/-1	J	HN1B04FU	AC
Q4152	VSHN1B04FU/-1	J	HN1B04FU	AC
Q4153	VSDTC144EU/-1	J	DTC144EU	AB
Q4154	VSHN1B04FU/-1	J	HN1B04FU	AC
Q4155	VSDTC144EU/-1	J	DTC144EU	AB
Q4156	VSHN2C01FU/-1	J	HN2C01FU	AC
Q4157	VS2SC2735/-1	J	2SC2735	AB
Q4201	VSHN1B04FU/-1	J	HN1B04FU	AC
Q4202	VSHN1B04FU/-1	J	HN1B04FU	AC
Q4203	VSDTC144EU/-1	J	DTC144EU	AB
Q4204	VSHN1B04FU/-1	J	HN1B04FU	AC
Q4205	VSDTC144EU/-1	J	DTC144EU	AB
Q4206	VSHN2C01FU/-1	J	HN2C01FU	AC
Q4207	VS2SC2735/-1	J	2SC2735	AB
Q4301	VSDTA114EU/-1	J	DTA114EU	AB
Q4302	VSDTC114EU/-1	J	DTC114EU	AB

Ref. No.	Part No.	★	Description	Code
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DUNTKA463DE01/02

SIGNAL UNIT(Continued)

Q4303	VS2SC114EU/-1	J	DTC114EU	AB
Q4304	VS2SC114EU/-1	J	DTC114EU	AB
Q4305	VS2SC114EU/-1	J	DTC114EU	AB
Q4306	VS2SC114EU/-1	J	DTC114EU	AB
Q4317	VS2SC3928AR-1	J	2SC3928AR	AB
Q4330	VS2SC3928AR-1	J	2SC3928AR	AB
Q4332	VS2SC3928AR-1	J	2SC3928AR	AB
Q4334	VS2SC3928AR-1	J	2SC3928AR	AB
Q4340	VS2SA1530AR-1	J	2SA1530AR	AB
Q4501	VS2SA1530AR-1	J	2SA1530AR	AB
Q4502	VS2SA1530AR-1	J	2SA1530AR	AB
Q4503	VS2SA1530AR-1	J	2SA1530AR	AB
Q4504	VS2SA1530AR-1	J	2SA1530AR	AB
Q4505	VS2SA1530AR-1	J	2SA1530AR	AB
Q4508	VS2SC3928AR-1	J	2SC3928AR	AB
Q4509	VS2SA1530AR-1	J	2SA1530AR	AB
Q4510	VS2SC3928AR-1	J	2SC3928AR	AB
Q4511	VS2SA1530AR-1	J	2SA1530AR	AB

DODES

D4101	VHDM157A/-1	J	Diode	AC
D4102	VHDM157A/-1	J	Diode	AB
D4103	VHDM157A/-1	J	Diode	AC
D4151	VHDM157A/-1	J	Diode	AC
D4152	VHDM157A/-1	J	Diode	AC
D4201	VHDM157A/-1	J	Diode	AC
D4202	VHDM157A/-1	J	Diode	AC
D4301	VHDM3120WA-1	J	Diode	AK
D4302	VHDM3120WA-1	J	Diode	AK
D4303	RH-EX0226CEZZ	J	Zener Diode	AB
D4304	RH-EX0226CEZZ	J	Zener Diode	AB

PACKAGED CIRCUIT

X4501	RCRSB0258CEZZ	J	Crystal	AG
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FILTERS AND COILS

FL4501	RCiLV0108GEZZ	J	Filter	AG
FL4502	RCiLF0306CEZZ	J	Filter	AH
L4101	VP-1M220J2R9N	J	Peaking 22μH	AC
L4301	VP-1M220J2R9N	J	Peaking 22μH	AC
L4501	VP-1M220J2R9N	J	Peaking 22μH	AC
L4503	VP-1M4R7J1R2N	J	Peaking 4.7μH	AB

CAPACITORS

C4101	RC-KZ0416CEZZ	J	10 25V Ceramic	AE
C4102	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4103	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4104	VCCCCY1HH221J	J	220p 50V Ceramic	AA
C4105	VCCCCY1HH220J	J	22p 50V Ceramic	AA
C4106	VCCCCY1HH151J	J	150p 50V Ceramic	AA
C4107	VCCCCY1HH151J	J	150p 50V Ceramic	AA
C4108	VCE9PF1CW106M	J	10 16V Elect.(N.P)	AC
C4109	VCCCCY1HH470J	J	47p 50V Ceramic	AA
C4110	VCCCCY1HH150J	J	15p 50V Ceramic	AA
C4111	VCCCCY1HH390J	J	39p 50V Ceramic	AA
C4112	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C4113	RC-KZ0416CEZZ	J	10 25V Ceramic	AE
C4114	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4115	VCCCCY1HH270J	J	27p 50V Ceramic	AA
C4116	VCCCCY1HH390J	J	39p 50V Ceramic	AA
C4117	VCKYCY1AF105Z	J	1.0 10V Ceramic	AC
C4118	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4119	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4151	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4152	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4153	VCCCCY1HH151J	J	150p 50V Ceramic	AA
C4154	VCCCCY1HH220J	J	22p 50V Ceramic	AA
C4155	VCCCCY1HH151J	J	150p 50V Ceramic	AA
C4156	VCCCCY1HH151J	J	150p 50V Ceramic	AA
C4157	VCCCCY1HH470J	J	47p 50V Ceramic	AA
C4158	VCCCCY1HH150J	J	15p 50V Ceramic	AA

Ref. No.	Part No.	★	Description	Code
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C4159	VCCCCY1HH390J	J	39p 50V Ceramic	AA
C4160	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C4161	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4162	VCCCCY1HH270J	J	27p 50V Ceramic	AA
C4163	VCCCCY1HH390J	J	39p 50V Ceramic	AA
C4164	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4201	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4202	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4203	VCCCCY1HH221J	J	220p 50V Ceramic	AA
C4204	VCCCCY1HH220J	J	22p 50V Ceramic	AA
C4205	VCCCCY1HH151J	J	150p 50V Ceramic	AA
C4206	VCCCCY1HH151J	J	150p 50V Ceramic	AA
C4207	VCCCCY1HH470J	J	47p 50V Ceramic	AA
C4208	VCCCCY1HH150J	J	15p 50V Ceramic	AA
C4209	VCCCCY1HH390J	J	39p 50V Ceramic	AA
C4210	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C4211	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4212	VCCCCY1HH270J	J	27p 50V Ceramic	AA
C4213	VCCCCY1HH390J	J	39p 50V Ceramic	AA
C4214	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4251	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4301	VCEAPV1CW106M	J	10 16V Electrolytic	AD
C4302	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4303	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4304	VCEAPV1CW226M	J	22 16V Electrolytic	AD
C4305	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4306	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4307	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4308	VCCCCY1HH390J	J	39p 50V Ceramic	AA
C4309	VCCCCY1HH390J	J	39p 50V Ceramic	AA
C4310	VCCCCY1HH390J	J	39p 50V Ceramic	AA
C4320	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4321	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4322	VCEAPF1CW107M	J	100 16V Electrolytic	AD
C4323	VCE9PF1CW106M	J	10 16V Elect.(N.P)	AC
C4325	VCE9PF1CW106M	J	10 16V Elect.(N.P)	AC
C4327	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4328	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4330	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4340	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4341	VCKYTV1CB224K	J	0.22 16V Ceramic	AB
C4343	VCEAPF0JW107M	J	100 6.3V Electrolytic	AC
C4344	VCKYTV1CB105K	J	1.0 16V Ceramic	AC
C4345	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4347	VCKYTV1CB105K	J	1.0 16V Ceramic	AC
C4349	VCKYTV1CB105K	J	1.0 16V Ceramic	AC
C4351	VCKYTV1CB224K	J	0.22 16V Ceramic	AB
C4353	VCKYTV1CB105K	J	1.0 16V Ceramic	AC
C4354	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4356	VCKYTV1CB105K	J	1.0 16V Ceramic	AC
C4358	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4359	VCKYTV1CB105K	J	1.0 16V Ceramic	AC
C4375	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4377	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C4380	VCEAPF1HW106M	J	10 50V Electrolytic	AB
C4405	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C4406	VCCCCY1HH120J	J	12p 50V Ceramic	AA
C4407	VCCCCY1HH270J	J	27p 50V Ceramic	AA
C4502	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C4503	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C4504	VCCCCY1HH120J	J	12p 50V Ceramic	AA
C4505	VCCCCY1HH270J	J	27p 50V Ceramic	AA
C4506	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C4507	VCCCCY1HH270J	J	27p 50V Ceramic	AA
C4508	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C4509	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4510	VCEAPF1CW476M	J	47 16V Electrolytic	AC
C4511	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4515	VCEAPF0JW476M	J	47 6.3V Electrolytic	AB
C4516	VCE9PF1HW105M	J	1.0 50V Elect.(N.P)	AC
C4517	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C4518	VCEAPF0JW107M	J	100 6.3V Electrolytic	AC
C4519	VCEAPF0JW107M	J	100 6.3V Electrolytic	AC
C4521	VCEAPF0JW476M	J	47 6.3V Electrolytic	AB
C4522	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKA463DE01/02									
SIGNAL UNIT(Continued)									
C4523	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4163	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA
C4524	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4164	VRS-CY1JF181J	J 180	1/16W Metal Oxide	AA
C4525	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4165	VRS-CY1JF220J	J 22	1/16W Metal Oxide	AA
C4526	VCEAPF1CW106M	J 10	16V Electrolytic	AB	R4166	VRS-CY1JF470J	J 47	1/16W Metal Oxide	AA
C4527	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4167	VRS-CY1JF471J	J 470	1/16W Metal Oxide	AA
C4528	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4168	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
C4529	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4169	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
C4530	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4201	VRS-CY1JF223J	J 22k	1/16W Metal Oxide	AA
C4531	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4202	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
C4532	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4203	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA
C4533	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4204	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA
C4534	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4205	VRS-CA1JF101J	J 100	1/16W Metal Oxide	AA
C4535	RC-EZ0569CEZZ	J 10	10V Electrolytic	AF	R4206	VRS-CA1JF221J	J 220	1/16W Metal Oxide	AC
C4536	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4207	VRS-CY1JF821J	J 820	1/16W Metal Oxide	AA
C4538	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4208	VRS-CA1JF101J	J 100	1/16W Metal Oxide	AA
C4540	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4209	VRS-CA1JF121J	J 120	1/16W Metal Oxide	AA
C4541	VCKYTV1CB334K	J 0.33	16V Ceramic	AC	R4210	VRS-CY1JF821J	J 820	1/16W Metal Oxide	AA
C4543	VCCCCY1HH471J	J 470p	50V Ceramic	AA	R4211	VRS-CB1JF820J	J 82	1/16W Metal Oxide	AA
C4554	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4212	VRS-CY1JF431F	J 430	1/16W Metal Oxide	AA
C4556	VCEAPF1HW474M	J 0.47	50V Electrolytic	AB	R4213	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA
C4557	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4214	VRS-CY1JF181J	J 180	1/16W Metal Oxide	AA
C4558	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4215	VRS-CY1JF220J	J 22	1/16W Metal Oxide	AA
C4559	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4216	VRS-CY1JF470J	J 47	1/16W Metal Oxide	AA
C4560	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4217	VRS-CY1JF471J	J 470	1/16W Metal Oxide	AA
C4561	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4218	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
C4562	VCCCCY1HH220J	J 22p	50V Ceramic	AA	R4219	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
C4563	VCCCCY1HH220J	J 22p	50V Ceramic	AA	R4251	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
C4564	VCEAPF1CW106M	J 10	16V Electrolytic	AB	R4253	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
C4565	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4255	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
C4566	VCCCCY1HH391J	J 390p	50V Ceramic	AA	R4301	VRS-CY1JF223J	J 22k	1/16W Metal Oxide	AA
C4567	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	R4302	VRS-CY1JF223J	J 22k	1/16W Metal Oxide	AA
C4579	RC-EZ0363CEZZ	J 33	6.3V Electrolytic	AC	R4303	VRS-CY1JF223J	J 22k	1/16W Metal Oxide	AA
RESISTORS					R4305	VRS-CY1JF750J	J 75	1/16W Metal Oxide	AA
R4101	VRS-CY1JF223J	J 22k	1/16W Metal Oxide	AA	R4306	VRS-CY1JF750J	J 75	1/16W Metal Oxide	AA
R4102	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA	R4307	VRS-CY1JF750J	J 75	1/16W Metal Oxide	AA
R4103	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA	R4308	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R4104	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA	R4309	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R4105	VRS-CA1JF101J	J 100	1/16W Metal Oxide	AA	R4310	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R4106	VRS-CA1JF221J	J 220	1/16W Metal Oxide	AC	R4311	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R4107	VRS-CY1JF821J	J 820	1/16W Metal Oxide	AA	R4312	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R4108	VRS-CA1JF101J	J 100	1/16W Metal Oxide	AA	R4313	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R4109	VRS-CA1JF121J	J 120	1/16W Metal Oxide	AA	R4314	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R4110	VRS-CY1JF821J	J 820	1/16W Metal Oxide	AA	R4316	VRS-CY1JF331J	J 330	1/16W Metal Oxide	AA
R4111	VRS-CB1JF820J	J 82	1/16W Metal Oxide	AA	R4317	VRS-CY1JF331J	J 330	1/16W Metal Oxide	AA
R4112	VRS-CB1JF181JY	J 180	1/16W Metal Oxide	AA	R4318	VRS-CY1JF331J	J 330	1/16W Metal Oxide	AA
R4113	VRS-CY1JF431F	J 430	1/16W Metal Oxide	AA	R4319	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R4114	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA	R4320	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R4115	VRS-CY1JF181J	J 180	1/16W Metal Oxide	AA	R4330	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R4116	VRS-CY1JF221J	J 220	1/16W Metal Oxide	AA	R4331	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R4117	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R4332	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R4118	VRS-CY1JF392J	J 3.9k	1/16W Metal Oxide	AA	R4333	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R4119	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA	R4336	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R4120	VRS-CY1JF681J	J 680	1/16W Metal Oxide	AA	R4337	VRS-CY1JF221J	J 220	1/16W Metal Oxide	AA
R4121	VRS-CY1JF470J	J 47	1/16W Metal Oxide	AA	R4338	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R4122	VRS-CY1JF471J	J 470	1/16W Metal Oxide	AA	R4348	VRS-CY1JF272J	J 2.7k	1/16W Metal Oxide	AA
R4123	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA	R4350	VRS-CY1JF332J	J 3.3k	1/16W Metal Oxide	AA
R4124	VRS-CY1JF220J	J 22	1/16W Metal Oxide	AA	R4359	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R4125	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R4360	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R4151	VRS-CY1JF223J	J 22k	1/16W Metal Oxide	AA	R4364	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R4152	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA	R4376	VRS-CY1JF393J	J 39k	1/16W Metal Oxide	AA
R4153	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA	R4377	VRS-CY1JF153J	J 15k	1/16W Metal Oxide	AA
R4154	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA	R4385	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R4155	VRS-CA1JF101J	J 100	1/16W Metal Oxide	AA	R4386	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R4156	VRS-CA1JF221J	J 220	1/16W Metal Oxide	AC	R4387	VRS-CY1JF153J	J 15k	1/16W Metal Oxide	AA
R4157	VRS-CY1JF821J	J 820	1/16W Metal Oxide	AA	R4388	VRS-CY1JF393J	J 39k	1/16W Metal Oxide	AA
R4158	VRS-CA1JF101J	J 100	1/16W Metal Oxide	AA	R4389	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R4159	VRS-CA1JF121J	J 120	1/16W Metal Oxide	AA	R4392	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R4160	VRS-CY1JF821J	J 820	1/16W Metal Oxide	AA	R4394	VRS-CY1JF153J	J 15k	1/16W Metal Oxide	AA
R4161	VRS-CB1JF820J	J 82	1/16W Metal Oxide	AA	R4398	VRS-CY1JF393J	J 39k	1/16W Metal Oxide	AA
R4162	VRS-CY1JF431F	J 430	1/16W Metal Oxide	AA	R4399	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
					R4401	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
					R4425	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
					R4426	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
					R4427	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
					R4429	VRS-CY1JF561J	J 560	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
DUNTKA463DE01/02				
SIGNAL UNIT(Continued)				
R4430	VRS-CY1JF561J	J	560 1/16W Metal Oxide	AA
R4431	VRS-CY1JF182J	J	1.8k 1/16W Metal Oxide	AA
R4432	VRS-CY1JF911J	J	910 1/16W Metal Oxide	AA
R4501	VRS-CY1JF272J	J	2.7k 1/16W Metal Oxide	AA
R4502	VRS-CY1JF182J	J	1.8k 1/16W Metal Oxide	AA
R4503	VRS-CY1JF182J	J	1.8k 1/16W Metal Oxide	AA
R4504	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R4505	VRS-CY1JF561F	J	560 1/16W Metal Oxide	AA
R4506	VRS-CY1JF911F	J	910 1/16W Metal Oxide	AA
R4507	VRS-CY1JF122J	J	1.2k 1/16W Metal Oxide	AA
R4508	VRS-CY1JF182J	J	1.8k 1/16W Metal Oxide	AA
R4509	VRS-CY1JF431F	J	430 1/16W Metal Oxide	AA
R4510	VRS-CY1JF911J	J	910 1/16W Metal Oxide	AA
R4511	VRS-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R4512	VRS-CY1JF471J	J	470 1/16W Metal Oxide	AA
R4513	VRS-CY1JF682J	J	6.8k 1/16W Metal Oxide	AA
R4514	VRS-CY1JF152J	J	1.5k 1/16W Metal Oxide	AA
R4515	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R4516	VRS-CY1JF391J	J	390 1/16W Metal Oxide	AA
R4517	VRS-CY1JF562J	J	5.6k 1/16W Metal Oxide	AA
R4518	VRS-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R4519	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R4520	VRS-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R4521	VRS-TV1JD000J	J	0 1/16W Metal Oxide	AA
R4522	VRS-CY1JF100J	J	10 1/16W Metal Oxide	AA
R4523	VRS-CY1JF100J	J	10 1/16W Metal Oxide	AA
R4524	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R4525	VRS-TV1JD000J	J	0 1/16W Metal Oxide	AA
R4527	VRS-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB
R4528	VRS-TV1JD5R6J	J	5.6 1/16W Metal Oxide	AA
R4530	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R4531	VRS-TV1JD000J	J	0 1/16W Metal Oxide	AA
R4532	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R4533	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R4535	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R4537	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R4538	VRS-CB1JF101J	J	100 1/16W Metal Oxide	AA
R4539	VRS-CB1JF101J	J	100 1/16W Metal Oxide	AA
R4540	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R4541	VRS-CB1JF101J	J	100 1/16W Metal Oxide	AA
R4542	VRS-CB1JF101J	J	100 1/16W Metal Oxide	AA
R4543	VRS-CB1JF101J	J	100 1/16W Metal Oxide	AA
R4544	VRS-CB1JF101J	J	100 1/16W Metal Oxide	AA
R4550	VRS-CY1JF221J	J	220 1/16W Metal Oxide	AA
R4551	VRS-CY1JF473J	J	47k 1/16W Metal Oxide	AA
R4552	VRS-CY1JF224J	J	220k 1/16W Metal Oxide	AA
R4554	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R4555	VRS-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R4557	VRS-CY1JF471J	J	470 1/16W Metal Oxide	AA
R4558	VRS-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
R4559	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R4565	VRS-CY1JF182J	J	1.8k 1/16W Metal Oxide	AA
R4566	VRS-CY1JF182J	J	1.8k 1/16W Metal Oxide	AA
R4568	VRS-CY1JF271J	J	270 1/16W Metal Oxide	AA
R4569	VRS-CY1JF271J	J	270 1/16W Metal Oxide	AA
R4570	VRS-CY1JF333J	J	33k 1/16W Metal Oxide	AA
R4571	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R4574	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R4575	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R4576	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R4577	VRS-CY1JF471J	J	470 1/16W Metal Oxide	AA
R4578	VRS-CY1JF471J	J	470 1/16W Metal Oxide	AA

MISCELLANEOUS PARTS

FB4301	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB4302	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB4303	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB4304	RBLN-0061TAZZ	J	Ferrite Bead	AD
FB4501	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB4502	RBLN-0061TAZZ	J	Ferrite Bead	AD
FB4503	RBLN-0061TAZZ	J	Ferrite Bead	AD

Ref. No.	Part No.	★	Description	Code
FB4504	RBLN-0061TAZZ	J	Ferrite Bead	AD
J4301	QPLGJ0403CEZZ	J	Jack	AF
P401	QPLGZ3044CEZZ	J	Plug 30-Pin	AH
P3005	QPLGZ3044CEZZ	J	Plug 30-Pin	AH
SC4301	QCNCW3026TAZZ	J	Socket 30-Pin	AF
SC4302	QCNCW2026TAZZ	J	Socket 20-Pin	AE
SC4303	QCNCW2026TAZZ	J	Socket 20-Pin	AE

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INPUT UNIT

INTEGRATED CIRCUITS

IC461	VHiNJM2245M-1	J	NJM2245M	AF
IC462	VHiNJM2245M-1	J	NJM2245M	AF
IC463	VHiNJM2245M-1	J	NJM2245M	AF
IC464	VHiNJM2245M-1	J	NJM2245M	AF
IC3001	VHiLV4053AT-1	J	SN74LV4053APWR	AE
IC3002	VHiLV4053AT-1	J	SN74LV4053APWR	AE
IC3003	VHi24LC21/-1	J	24LC21T	AN
IC3051	VHiNJM2903V-1	J	NJM2903V	AD
IC3052	VHiTL712CPW-1	J	TI712CPWR	AL
IC3053	VHiTHC4538T-1	J	TC74HC4538AFT	AL
IC3054	VHiTL712CPW-1	J	TI712CPWR	AL
IC3101	VHiTL712CPW-1	J	TI712CPWR	AL
IC3102	VHiTL712CPW-1	J	TI712CPWR	AL
IC3151	VHiAD8013AR-1	J	AD8013AR-14	AV
IC3152	VHiTL712CPW-1	J	TI712CPWR	AL
IC3153	VHiLT1399CS-1Y	J	LT1399CS	AU
IC3301	VHiLV125AT+-1	J	SN74LV125APWR	AE
IC3302	VHiAD8185+-1	J	AD8185ARU	AW
IC5555	VHiNJM2245M-1	J	NJM2245M	AF
IC5556	VHiTC7S08F/-1	J	TC7S08F	AC
IC5557	VHiSN2G53CT-1	J	SN74AHC2G53HDC	AE
IC5559	RRMCU0233CEZZ	J		AF

TRANSISTORS

Q461	VS2SA1530AR-1	J	2SA1530AR	AB
Q462	VS2SC3928AR-1	J	2SC3928AR	AB
Q463	VSDTC144EU/-1	J	DTC144EU	AB
Q464	VS2SA1530AR-1	J	2SA1530AR	AB
Q465	VSDTC144EU/-1	J	DTC144EU	AB
Q466	VSDTC144EU/-1	J	DTC144EU	AB
Q467	VS2SC3928AR-1	J	2SC3928AR	AB
Q468	VSDTC144EU/-1	J	DTC144EU	AB
Q3051	VS2SC3928AR-1	J	2SC3928AR	AB
Q3052	VS2SA1530AR-1	J	2SA1530AR	AB
Q3053	VS2SC3928AR-1	J	2SC3928AR	AB
Q3054	VS2SA1530AR-1	J	2SA1530AR	AB
Q3151	VSDTA114EU/-1	J	DTA114EU	AB
Q3152	VSDTC144EU/-1	J	DTC144EU	AB
Q5551	VSDTC144EK/-1	J	DTC144EK	AB
Q5552	VSDTC144EU/-1	J	DTC144EU	AB
Q5553	VSDTC144EU/-1	J	DTC144EU	AB

DIODES

D401	RH-EX0226CEZZ	J	Zener Diode	AB
D402	RH-EX0226CEZZ	J	Zener Diode	AB
D403	RH-EX0226CEZZ	J	Zener Diode	AB
D431	RH-EX0226CEZZ	J	Zener Diode	AB
D432	RH-EX0226CEZZ	J	Zener Diode	AB
D441	RH-EX0226CEZZ	J	Zener Diode	AB
D442	RH-EX0226CEZZ	J	Zener Diode	AB
D451	RH-EX0226CEZZ	J	Zener Diode	AB
D452	RH-EX0226CEZZ	J	Zener Diode	AB
D3001	VHDM157A/-1	J	Diode	AC
D3002	VHDM157A/-1	J	Diode	AC
D3003	VHDM157A/-1	J	Diode	AC
D3004	VHDM157A/-1	J	Diode	AC
D3021	VHDM157A/-1	J	Diode	AC
D3022	VHDM157A/-1	J	Diode	AC
D3023	VHDM157A/-1	J	Diode	AC
D3051	VHDM157A/-1	J	Diode	AC
D3053	VHDM157A/-1	J	Diode	AC

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKA464DE01/02									
INPUT UNIT(Continued)									
D3151	VHDMA157A/-1	J	Diode	AC	C471	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC
D3152	VHDMA157A/-1	J	Diode	AC	C472	VCEAPF1CW106M	J 10	16V Electrolytic	AB
D3153	VHDMA157A/-1	J	Diode	AC	C473	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
D3154	VHDMA157A/-1	J	Diode	AC	C474	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
D3155	VHDMA152WA/-1	J	Diode	AA	C3001	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D3156	VHDMA157A/-1	J	Diode	AC	C3002	VCEAPF0JW476M	J 47	6.3V Electrolytic	AB
D3157	VHDMA157A/-1	J	Diode	AC	C3003	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D3158	VHDMA152WA/-1	J	Diode	AA	C3004	VCKYCY1HB103K	J 0.01	50V Ceramic	AA
D3201	VHDMA3120WA-1	J	Diode	AK	C3051	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC
D3202	VHDMA3120WA-1	J	Diode	AK	C3052	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D3203	VHDMA3120WA-1	J	Diode	AK	C3053	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC
D3204	VHDMA3120WA-1	J	Diode	AK	C3054	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D3205	VHDMA3120WA-1	J	Diode	AK	C3055	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D3206	VHDMA3120WA-1	J	Diode	AK	C3056	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC
D3207	VHDMA3120WA-1	J	Diode	AK	C3057	VCKYCY1HB472K	J 4700p	50V Ceramic	AA
D3208	VHDMA3120WA-1	J	Diode	AK	C3058	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC
D3301	VHDMA157A/-1	J	Diode	AC	C3059	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D3302	VHDMA157A/-1	J	Diode	AC	C3060	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D3303	VHDMA157A/-1	J	Diode	AC	C3061	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D3304	VHDMA157A/-1	J	Diode	AC	C3101	VCCCCY1HH330J	J 33p	50V Ceramic	AA
D3305	VHDMA157A/-1	J	Diode	AC	C3102	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D3306	VHDMA157A/-1	J	Diode	AC	C3103	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D5551	VHDMA3120WA-1	J	Diode	AK	C3104	VCCCCY1HH330J	J 33p	50V Ceramic	AA
D5552	RH-EX0226CEZZ	J	Zener Diode	AB	C3105	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D5553	VHDMA3120WA-1	J	Diode	AK	C3106	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
D5554	VHDF01J2E/-1	J	Diode	AC	C3153	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
FILTERS AND COIL					C3155	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
FL401	RFILN0017TAZZ	J	Filter	AC	C3156	VCEAPF0JW476M	J 47	6.3V Electrolytic	AB
FL412	RFILN0017TAZZ	J	Filter	AC	C3157	VCCCCY1HH330J	J 33p	50V Ceramic	AA
FL413	RFILN0514CEZZ	J	Filter	AE	C3158	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
FL3001	RFILN0003TAZZ	J	Filter	AD	C3159	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
FL3002	RFILN0003TAZZ	J	Filter	AD	C3160	VCEAPF1CW226M	J 22	16V Electrolytic	AB
FL3003	RFILN0003TAZZ	J	Filter	AD	C3161	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
FL3021	RFILN0003TAZZ	J	Filter	AD	C3162	VCEAPF1CW226M	J 22	16V Electrolytic	AB
FL3022	RFILN0003TAZZ	J	Filter	AD	C3163	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
FL3023	RFILN0003TAZZ	J	Filter	AD	C3301	VCEAPF0JW226M	J 22	6.3V Electrolytic	AB
FL3151	RFILN0003TAZZ	J	Filter	AD	C3302	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
FL3152	RFILN0003TAZZ	J	Filter	AD	C3303	VCEAPF1CW226M	J 22	16V Electrolytic	AB
FL3153	RFILN0003TAZZ	J	Filter	AD	C3304	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
L3001	VP-1M100J1R6N	J	Peaking 10μH	AC	C3305	VCE9PF0JW476M	J 47	6.3V Elect.(N.P)	AD
CAPACITORS					C3306	VCE9PF0JW476M	J 47	6.3V Elect.(N.P)	AD
C401	VCCCCY1HH101J	J 100p	50V Ceramic	AA	C3307	VCKYCY1HB103K	J 0.01	50V Ceramic	AA
C402	VCCCCY1HH101J	J 100p	50V Ceramic	AA	C3308	VCKYCY1HB103K	J 0.01	50V Ceramic	AA
C403	VCEAPF1CW106M	J 10	16V Electrolytic	AB	C3309	VCE9PF0JW476M	J 47	6.3V Elect.(N.P)	AD
C404	VCEAPF1CW106M	J 10	16V Electrolytic	AB	C3310	VCE9PF0JW476M	J 47	6.3V Elect.(N.P)	AD
C405	VCEAPF1CW106M	J 10	16V Electrolytic	AB	C3311	VCKYCY1HB103K	J 0.01	50V Ceramic	AA
C406	VCCCCY1HH101J	J 100p	50V Ceramic	AA	C3312	VCKYCY1HB103K	J 0.01	50V Ceramic	AA
C431	VCCCCY1HH101J	J 100p	50V Ceramic	AA	C3313	VCEAPF1CW226M	J 22	16V Electrolytic	AB
C433	VCCCCY1HH101J	J 100p	50V Ceramic	AA	C3314	VCE9PF0JW476M	J 47	6.3V Elect.(N.P)	AD
C435	VCEAPF1CW106M	J 10	16V Electrolytic	AB	C3315	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C436	VCEAPF1CW106M	J 10	16V Electrolytic	AB	C3316	VCE9PF0JW476M	J 47	6.3V Elect.(N.P)	AD
C441	VCCCCY1HH101J	J 100p	50V Ceramic	AA	C3317	VCKYCY1HB103K	J 0.01	50V Ceramic	AA
C443	VCCCCY1HH101J	J 100p	50V Ceramic	AA	C3318	VCKYCY1HB103K	J 0.01	50V Ceramic	AA
C445	VCEAPF1CW106M	J 10	16V Electrolytic	AB	C5551	VCCCCY1HH101J	J 100p	50V Ceramic	AA
C446	VCEAPF1CW106M	J 10	16V Electrolytic	AB	C5552	VCCCCY1HH101J	J 100p	50V Ceramic	AA
C451	VCCCCY1HH101J	J 100p	50V Ceramic	AA	C5555	VCEAPF1CW106M	J 10	16V Electrolytic	AB
C453	VCCCCY1HH101J	J 100p	50V Ceramic	AA	C5557	VCEAPF0JW107M	J 100	6.3V Electrolytic	AC
C455	VCEAPF1CW106M	J 10	16V Electrolytic	AB	C5558	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C456	VCEAPF1CW106M	J 10	16V Electrolytic	AB	C5559	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C461	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	C5560	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C462	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	C5562	VCEAPF0JW107M	J 100	6.3V Electrolytic	AC
C463	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	C5563	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C464	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	RESISTORS				
C465	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	R401	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
C466	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC	R402	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
C467	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	R403	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
C468	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC	R404	VRS-CY1JF123J	J 12k	1/16W Metal Oxide	AA
C469	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC	R405	VRS-CY1JF123J	J 12k	1/16W Metal Oxide	AA
C470	VCEAPF1CW106M	J 10	16V Electrolytic	AB	R406	VRS-TQ2BD750J	J 75	1/8W Metal Oxide	AA
					R407	VRS-CY1JF224J	J 220k	1/16W Metal Oxide	AA
					R408	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
					R409	VRS-CY1JF224J	J 220k	1/16W Metal Oxide	AA
					R411	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
					R412	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
DUNTKA464DE01/02				
INPUT UNIT(Continued)				
R414	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R415	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R418	VRS-TQ2BD750J	J 75	1/8W Metal Oxide	AA
R419	VRS-TQ2BD750J	J 75	1/8W Metal Oxide	AA
R421	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R422	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R431	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R432	VRS-CY1JF123J	J 12k	1/16W Metal Oxide	AA
R433	VRS-CY1JF123J	J 12k	1/16W Metal Oxide	AA
R434	VRS-CY1JF224J	J 220k	1/16W Metal Oxide	AA
R435	VRS-CY1JF224J	J 220k	1/16W Metal Oxide	AA
R441	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R442	VRS-CY1JF123J	J 12k	1/16W Metal Oxide	AA
R443	VRS-CY1JF123J	J 12k	1/16W Metal Oxide	AA
R444	VRS-CY1JF224J	J 220k	1/16W Metal Oxide	AA
R445	VRS-CY1JF224J	J 220k	1/16W Metal Oxide	AA
R451	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R452	VRS-CY1JF105J	J 1.0M	1/16W Metal Oxide	AA
R453	VRS-CY1JF105J	J 1.0M	1/16W Metal Oxide	AA
R454	VRS-CY1JF681J	J 680	1/16W Metal Oxide	AA
R455	VRS-CY1JF681J	J 680	1/16W Metal Oxide	AA
R461	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R462	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R463	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R464	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R465	VRS-CY1JF682J	J 6.8k	1/16W Metal Oxide	AA
R466	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R467	VRS-CY1JF562J	J 5.6k	1/16W Metal Oxide	AA
R468	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R469	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R470	VRS-CY1JF682J	J 6.8k	1/16W Metal Oxide	AA
R471	VRS-CY1JF272J	J 2.7k	1/16W Metal Oxide	AA
R472	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R473	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R474	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R476	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R477	VRS-CY1JF562J	J 5.6k	1/16W Metal Oxide	AA
R478	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R479	VRS-CY1JF272J	J 2.7k	1/16W Metal Oxide	AA
R480	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R481	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R482	VRS-CY1JF153J	J 15k	1/16W Metal Oxide	AA
R483	VRS-CY1JF153J	J 15k	1/16W Metal Oxide	AA
R484	VRS-CY1JF153J	J 15k	1/16W Metal Oxide	AA
R485	VRS-CY1JF153J	J 15k	1/16W Metal Oxide	AA
R3002	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3003	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3004	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3006	VRS-CY1JF473J	J 47k	1/16W Metal Oxide	AA
R3007	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3008	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3009	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3010	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3011	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3012	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3013	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3021	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3022	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3023	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3024	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3025	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3051	VRS-CY1JF183J	J 18k	1/16W Metal Oxide	AA
R3052	VRS-CY1JF472J	J 4.7k	1/16W Metal Oxide	AA
R3053	VRS-CY1JF391J	J 390	1/16W Metal Oxide	AA
R3054	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3055	VRS-CY1JF333J	J 33k	1/16W Metal Oxide	AA
R3056	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R3057	VRS-CY1JF391J	J 390	1/16W Metal Oxide	AA
R3058	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3059	VRS-CY1JF153J	J 15k	1/16W Metal Oxide	AA
R3062	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3063	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA

R3064	VRS-CY1JF330J	J 33	1/16W Metal Oxide	AA
R3065	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R3066	VRS-CY1JF392J	J 3.9k	1/16W Metal Oxide	AA
R3067	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R3068	VRS-CY1JF153J	J 15k	1/16W Metal Oxide	AA
R3069	VRS-CY1JF333J	J 33k	1/16W Metal Oxide	AA
R3070	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R3071	VRS-CY1JF183J	J 18k	1/16W Metal Oxide	AA
R3072	VRS-CY1JF472J	J 4.7k	1/16W Metal Oxide	AA
R3073	VRS-CY1JF391J	J 390	1/16W Metal Oxide	AA
R3074	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R3075	VRS-CY1JF391J	J 390	1/16W Metal Oxide	AA
R3076	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3077	VRS-CY1JF473J	J 47k	1/16W Metal Oxide	AA
R3080	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3081	VRS-CY1JF330J	J 33	1/16W Metal Oxide	AA
R3082	VRS-CY1JF392J	J 3.9k	1/16W Metal Oxide	AA
R3083	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R3084	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3085	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3101	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3102	VRS-CY1JF271J	J 270	1/16W Metal Oxide	AA
R3104	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3105	VRS-CY1JF330J	J 33	1/16W Metal Oxide	AA
R3106	VRS-CY1JF392J	J 3.9k	1/16W Metal Oxide	AA
R3108	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R3109	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3110	VRS-CY1JF271J	J 270	1/16W Metal Oxide	AA
R3112	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3113	VRS-CY1JF330J	J 33	1/16W Metal Oxide	AA
R3114	VRS-CY1JF392J	J 3.9k	1/16W Metal Oxide	AA
R3116	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R3152	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3153	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3154	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3155	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3156	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3158	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3160	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3161	VRS-CY1JF271J	J 270	1/16W Metal Oxide	AA
R3162	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3163	VRS-CY1JF330J	J 33	1/16W Metal Oxide	AA
R3164	VRS-CY1JF392J	J 3.9k	1/16W Metal Oxide	AA
R3165	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R3166	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3167	VRS-CY1JF361J	J 360	1/16W Metal Oxide	AA
R3168	VRS-CY1JF361J	J 360	1/16W Metal Oxide	AA
R3169	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3170	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3171	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R3172	VRS-CY1JF361J	J 360	1/16W Metal Oxide	AA
R3173	VRS-TV1JD000J	J 0	1/16W Metal Oxide	AA
R3174	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3175	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA
R3201	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3202	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3203	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3204	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3205	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3206	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3207	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3208	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R3301	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA
R3302	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA
R3303	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA
R3305	VRS-CY1JF750J	J 75	1/16W Metal Oxide	AA
R3309	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3310	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3311	VRS-CY1JF750J	J 75	1/16W Metal Oxide	AA
R3313	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3314	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3315	VRS-TW2ED750J	J 75	1/4W Metal Oxide	AA
R3316	VRS-CY1JF750J	J 75	1/16W Metal Oxide	AA
R3320	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R3321	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code
DUNTKA464DE01/02				
INPUT UNIT(Continued)				
R3322	VRS-CY1JF121J	J	120 1/16W Metal Oxide	AA
R3323	VRS-CY1JF121J	J	120 1/16W Metal Oxide	AA
R3325	VRS-CY1JF121J	J	120 1/16W Metal Oxide	AA
R3336	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R3339	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5551	VRS-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
R5552	VRS-CY1JF154J	J	150k 1/16W Metal Oxide	AA
R5553	VRS-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
R5554	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R5555	VRS-TX2HF220J	J	22 1/2W Metal Oxide	AB
R5556	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5557	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R5558	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R5561	VRS-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
R5562	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
MISCELLANEOUS PARTS				
FB401	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB402	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB403	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB432	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB433	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB442	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB443	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB452	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB453	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB3001	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3002	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3003	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3004	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3005	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3021	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3022	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3151	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3152	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3153	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3154	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB3155	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB3201	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3202	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3203	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3204	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3205	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3206	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3207	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB3208	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB5551	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB5552	RBLN-0060TAZZ	J	Ferrite Bead	AB
FB5553	RBLN-0060TAZZ	J	Ferrite Bead	AB
J401	QJAKG0064CEZZ	J	3-RCA Jacks	AG
J411	QSOC0403GEZZ	J	Din Jack	AE
J431	QJAKJ0008GEZZ	J	Jack	AD
J441	QJAKJ0008GEZZ	J	Jack	AD
J451	QJAKJ0008GEZZ	J	Jack	AD
J3021	QTANZ0632CEZZ	J	5-BNC RGBHV	AR
J5551	QJAKJ0007TAZZ	J	Jack	AC
SC401	QSOCZ3043CEZZ	J	Socket 30-Pin	AG
SC3001	QSOCN0448FJZZ	J	15-Pin D-sub RGB	AM
SC3005	QSOCZ3043CEZZ	J	Socket 30-Pin	AG
SC3151	QSOCN0344FJZZ	J	15-Pin D-sub RGB	AM
SC3201	QSOCN0345FJZZ	J	9-Pin D-sub	AM
SC3202	QSOCN0345FJZZ	J	9-Pin D-sub	AM
SW5551	QSW-S0230CEZZ	J	Slide Switch	AG
	PSLDM4661CEFW	J	Shield	AH
	QEARP0093CEFN	J	Earth Plate	AE

Ref. No.	Part No.	★	Description	Code
DUNTKA465DE01/02				
OUTPUT UNIT				
INTEGRATED CIRCUITS				
IC331	VHiTA8184F/-1	J	TA8184F	AN
IC1001	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC1002	VHiM62352GP-1	J	M62352GP	AQ
IC1003	VHiNJM2060V-1	J	NJM2060V	AF
IC1004	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC1005	VHiM62352GP-1	J	M62352GP	AQ
IC1101	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1102	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1103	VHiNJM318M/-1	J	NJM318M	AG
IC1104	VHiNJM318M/-1	J	NJM318M	AG
IC1105	VHiTC4S66F/-1	J	TC4S66F	AD
IC1201	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1202	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1203	VHiNJM318M/-1	J	NJM318M	AG
IC1204	VHiNJM2902V-1	J	NJM2902V	AD
IC1205	VHiTC4S66F/-1	J	TC4S66F	AD
IC1301	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1302	VHiCXA3512R-1	J	CXA3512R-T6	BB
IC1303	VHiTC4S66F/-1	J	TC4S66F	AD
IC1401	VHiCXA2111R-1	J	CXA2111R	BB
IC1402	VHiTHC221AF-1	J	TC74HC221AF	AG
IC1551	RH-iX1952CEZZ	J	74F86SJ	AD
IC1552	VHi74HCT125-1	J	HD74HCT125T	AF
IC1553	RH-iX1952CEZZ	J	74F86SJ	AD
IC1554	VHi74HCT125-1	J	HD74HCT125T	AF
IC1555	RH-iX1952CEZZ	J	74F86SJ	AD
IC1556	VHi74HCT125-1	J	HD74HCT125T	AF
IC1557	VHi7SET08U-1	J	TC7SET08FU	AE
IC1558	VHiHCT541AF-1	J	TC74HCT541AF	AG
IC1559	VHiHCT541AF-1	J	TC74HCT541AF	AG
IC2601	RH-iX3548CEN1Q	J	lc	BC
IC2602	VHi7SET08U-1	J	TC7SET08FU	AE
IC2603	VHiT7WH241U-1	J	TC7WH241FU	AF
IC2604	VHiT7WH241U-1	J	TC7WH241FU	AF
IC2605	VHi7SET08U-1	J	TC7SET08FU	AE
IC2606	VHi7SET08U-1	J	TC7SET08FU	AE
IC2607	VHiPST600iM-1	J	IC-PST600iMT	AE
IC2608	VHiSN2G32CT-1	J	SN74AHC2G32HDC	AE
IC5101	VHiPQ05TZ11-1	J	PQ05TZ11	AH
IC5102	VHiLB1831M/-1	J	LB1831M	AL
IC5252	VHiM62352GP-1	J	M62352GP	AQ
IC5301	VHiM62320FP-1	J	M62320FP	AK
IC5302	VHiM62320FP-1	J	M62320FP	AK
IC5303	VHiBR24C64F-1	J	BR24C64F-E2	AL
IC5304	VHiM62320FP-1	J	M62320FP	AK
IC5305	VHiM62352GP-1	J	M62352GP	AQ
IC5401	VHiCA1875AM-1	J	CXA1875AM	AQ
IC5402	VHiSNHC153T-1	J	SN74HC153PW	AK
IC5403	VHiLM81++++-1	J	LM81C1MTX-3	AS
IC7003	VHiPQ05TZ11-1	J	PQ05TZ11	AH
IC7004	VHiPQ05TZ11-1	J	PQ05TZ11	AH
IC7051	VHiPQ05TZ11-1	J	PQ05TZ11	AH
IC7053	VHiPQ05SZ51-1	J	PQ05SZ51	AG
IC7054	RH-iX2296CEZZ	J	TC7S66F	AD
IC7055	VHiTC4W66U/-1	J	TC4W66FU	AF
IC7056	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC7057	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC7058	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC7059	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC7151	VHiPQ05TZ11-1	J	PQ05TZ11	AH
IC7153	RH-iX2204CEZZ	J	PQ20VZ11	AG

TRANSISTORS				
Q331	VS2SC3928AR-1	J	2SC3928AR	AB
Q333	VS2SA1530AR-1	J	2SA1530AR	AB
Q334	VS2SA1530AR-1	J	2SA1530AR	AB
Q335	VSDTA114EU/-1	J	DTA114EU	AB
Q336	VSDTC114EU/-1	J	DTC114EU	AB
Q337	VSDTC114EU/-1	J	DTC114EU	AB
Q1101	VS2SA1530AR-1	J	2SA1530AR	AB

Ref. No.	Part No.	★	Description	Code
DUNTKA465DE01/02				
OUTPUT UNIT(Continued)				
Q1102	VSHN1B04FU/-1	J	HN1B04FU	AC
Q1103	VSIMX2/////1	J	iMX2	AB
Q1104	VSHN1B04FU/-1	J	HN1B04FU	AC
Q1105	VSHN1B04FU/-1	J	HN1B04FU	AC
Q1106	VS2SC3928AR-1	J	2SC3928AR	AB
Q1107	VS2SA1530AR-1	J	2SA1530AR	AB
Q1108	VS2SC3928AR-1	J	2SC3928AR	AB
Q1109	VS2SA1530AR-1	J	2SA1530AR	AB
Q1110	VSIMX2/////1	J	iMX2	AB
Q1111	VS2SC3928AR-1	J	2SC3928AR	AB
Q1112	VSIMX2/////1	J	iMX2	AB
Q1113	VS2SC3928AR-1	J	2SC3928AR	AB
Q1114	VS2SC3928AR-1	J	2SC3928AR	AB
Q1115	VS2SA1530AR-1	J	2SA1530AR	AB
Q1116	VS2SC3928AR-1	J	2SC3928AR	AB
Q1117	VS2SA1530AR-1	J	2SA1530AR	AB
Q1118	VSHN1B04FU/-1	J	HN1B04FU	AC
Q1119	VS2SC3928AR-1	J	2SC3928AR	AB
Q1201	VS2SC3928AR-1	J	2SC3928AR	AB
Q1202	VS2SA1530AR-1	J	2SA1530AR	AB
Q1203	VS2SC3928AR-1	J	2SC3928AR	AB
Q1204	VS2SA1530AR-1	J	2SA1530AR	AB
Q1205	VS2SC3928AR-1	J	2SC3928AR	AB
Q1206	VS2SA1530AR-1	J	2SA1530AR	AB
Q1207	VS2SC3928AR-1	J	2SC3928AR	AB
Q1208	VS2SA1530AR-1	J	2SA1530AR	AB
Q1209	VSHN1B04FU/-1	J	HN1B04FU	AC
Q1210	VSHN1B04FU/-1	J	HN1B04FU	AC
Q1301	VS2SA1530AR-1	J	2SA1530AR	AB
Q1302	VS2SC3928AR-1	J	2SC3928AR	AB
Q1303	VS2SA1530AR-1	J	2SA1530AR	AB
Q1304	VS2SC3928AR-1	J	2SC3928AR	AB
Q1305	VS2SA1530AR-1	J	2SA1530AR	AB
Q1306	VS2SC3928AR-1	J	2SC3928AR	AB
Q1307	VS2SA1530AR-1	J	2SA1530AR	AB
Q1308	VS2SC3928AR-1	J	2SC3928AR	AB
Q1309	VS2SA1530AR-1	J	2SA1530AR	AB
Q1401	VS2SC2735//1	J	2SC2735	AB
Q1402	VS2SC2735//1	J	2SC2735	AB
Q1403	VS2SC2735//1	J	2SC2735	AB
Q1404	VSIMT2/////1	J	iMT2	AB
Q1601	VSHN1B04FU/-1	J	HN1B04FU	AC
Q1602	VSHN1B04FU/-1	J	HN1B04FU	AC
Q1603	VSHN1B04FU/-1	J	HN1B04FU	AC
Q1607	VS2SC3928AR-1	J	2SC3928AR	AB
Q1608	VS2SC3928AR-1	J	2SC3928AR	AB
Q1609	VS2SC3928AR-1	J	2SC3928AR	AB
Q2601	VSDTC144EU/-1	J	DTC144EU	AB
Q2602	VSDTC144EU/-1	J	DTC144EU	AB
Q2603	VSDTC114EU/-1	J	DTC114EU	AB
Q2619	VS2SC3928AR-1	J	2SC3928AR	AB
Q2620	VSDTC144EU/-1	J	DTC144EU	AB
Q2621	VS2SC3928AR-1	J	2SC3928AR	AB
Q2622	VSDTC144EU/-1	J	DTC144EU	AB
Q2623	VS2SC3928AR-1	J	2SC3928AR	AB
Q2624	VS2SC3928AR-1	J	2SC3928AR	AB
Q2625	VSDTC144EU/-1	J	DTC144EU	AB
Q2626	VSDTC144EU/-1	J	DTC144EU	AB
Q2627	VSDTC144EU/-1	J	DTC144EU	AB
Q2628	VSDTC144EU/-1	J	DTC144EU	AB
Q2629	VSDTC144EU/-1	J	DTC144EU	AB
Q2630	VSDTC144EU/-1	J	DTC144EU	AB
Q2631	VSDTC144EU/-1	J	DTC144EU	AB
Q2632	VSDTC144EU/-1	J	DTC144EU	AB
Q2633	VSDTC144EU/-1	J	DTC144EU	AB
Q2634	VSDTA114EU/-1	J	DTA114EU	AB
Q2635	VSDTC144EU/-1	J	DTC144EU	AB
Q2636	VS2SC3928AR-1	J	2SC3928AR	AB
Q5301	VSDTC144EU/-1	J	DTC144EU	AB
Q5302	VS2SC2735//1	J	2SC2735	AB
Q5303	VS2SC2735//1	J	2SC2735	AB

Ref. No.	Part No.	★	Description	Code
Q5304	VS2SC2735//1	J	2SC2735	AB
Q5305	VS2SC2735//1	J	2SC2735	AB
Q5306	VS2SC3928AR-1	J	2SC3928AR	AB
Q5451	VSDTC144EU/-1	J	DTC144EU	AB
Q5452	VSDTC144EU/-1	J	DTC144EU	AB
Q5453	VSDTC144EU/-1	J	DTC144EU	AB
Q5454	VSDTA114EU/-1	J	DTA114EU	AB
Q7051	VS2SD1664R/-1	J	2SD1664R	AC
Q7052	VS2SA1530AR-1	J	2SA1530AR	AB
Q7053	VSDTC114EU/-1	J	DTC114EU	AB
Q7054	VS2SD1664R/-1	J	2SD1664R	AC
Q7055	VS2SD1664R/-1	J	2SD1664R	AC
Q7056	VS2SB1132Q/-1	J	2SB1132Q	AC
Q7057	VS2SA1530AR-1	J	2SA1530AR	AB
Q7058	VSDTC114EU/-1	J	DTC114EU	AB
Q7059	VS2SD1664R/-1	J	2SD1664R	AC
Q7060	VS2SB1132Q/-1	J	2SB1132Q	AC
Q7061	VSDTA114EU/-1	J	DTA114EU	AB
Q7062	VSDTC114EU/-1	J	DTC114EU	AB
Q7063	VS2SC3928AR-1	J	2SC3928AR	AB
Q7064	VSDTC144EU/-1	J	DTC144EU	AB
Q7065	VSDTC144EU/-1	J	DTC144EU	AB
Q7066	VS2SC3928AR-1	J	2SC3928AR	AB
Q7067	VSBSN200///-1	J	BSN20	AD
Q7068	VSBSN200///-1	J	BSN20	AD

DIODES

D1001	VHDDAN202K/-1	J	Diode	AB
D1002	VHDDAN202K/-1	J	Diode	AB
D1101	VHDDMA153///-1	J	Diode	AB
D1102	VHDDMA153///-1	J	Diode	AB
D1103	VHDDMA153///-1	J	Diode	AB
D1104	VHDDMA153///-1	J	Diode	AB
D1105	VHDDMA153///-1	J	Diode	AB
D1106	VHDDMA153///-1	J	Diode	AB
D2601	VHDDMA3120WA-1	J	Diode	AK
D2611	VHDBR425D//1	J	Diode	AD
D2612	VHDBR425D//1	J	Diode	AD
D2613	VHDBR425D//1	J	Diode	AD
D2614	VHDBR425D//1	J	Diode	AD
D2615	VHDDMA153///-1	J	Diode	AB
D2616	VHDDMA153///-1	J	Diode	AB
D2617	VHDDMA153///-1	J	Diode	AB
D2618	VHDDMA153///-1	J	Diode	AB
D2619	VHDBR425D//1	J	Diode	AD
D2620	VHDBR425D//1	J	Diode	AD
D2621	VHDBR425D//1	J	Diode	AD
D2622	VHDBR425D//1	J	Diode	AD
D2623	VHDBR425D//1	J	Diode	AD
D2624	VHDDMA153///-1	J	Diode	AB
D2625	VHDDMA153///-1	J	Diode	AB
D2626	VHDDMA153///-1	J	Diode	AB
D2627	VHDDMA153///-1	J	Diode	AB
D2628	VHDDMA153///-1	J	Diode	AB
D5101	VHDDAN202K/-1	J	Diode	AB
D7004	VHDDAN202K/-1	J	Diode	AB
D7051	VHDDAN202K/-1	J	Diode	AB
D7052	RH-EX0519CEZZ	J	Zener Diode	AB
D7053	VHDDAN202K/-1	J	Diode	AB
D7055	VHDDAN202K/-1	J	Diode	AB
D7057	RH-EX0519CEZZ	J	Zener Diode	AB
D7058	VHDDAN202K/-1	J	Diode	AB
D7059	RH-EX0228CEZZ	J	Zener Diode	AB
D7060	VHDDAN202K/-1	J	Diode	AB
D7061	VHDDAN202K/-1	J	Diode	AB
D7062	VHDDAN202K/-1	J	Diode	AB
D7063	VHDDAN202K/-1	J	Diode	AB
D7064	RH-EX0858CEZZ	J	Zener Diode	AC
D7065	VHDF01J2E//1	J	Diode	AC
D7151	VHDDAN202K/-1	J	Diode	AB
D7153	VHDDAN202K/-1	J	Diode	AB

PACKAGED CIRCUIT

X2601	RCRSB0286CEZZ	J	Crystal	AH
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Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKA465DE01/02									
OUTPUT UNIT(Continued)									
COILS									
L1101	VP-1M100J1R6N	J	Peaking 10μH	AC	C1134	VCKYCY1AF105Z	J 1.0	10V Ceramic	AC
L1102	VP-1M100J1R6N	J	Peaking 10μH	AC	C1135	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
L1201	VP-1M100J1R6N	J	Peaking 10μH	AC	C1136	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
L1202	VP-1M100J1R6N	J	Peaking 10μH	AC	C1203	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
L1301	VP-1M100J1R6N	J	Peaking 10μH	AC	C1204	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
L1302	VP-1M100J1R6N	J	Peaking 10μH	AC	C1205	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
CAPACITORS					C1206	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C331	VCEAPV1CW476M	J 47	16V Electrolytic	AD	C1207	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C332	VCKYTV1CF105Z	J 1.0	16V Ceramic	AB	C1208	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C333	VCKYCY1HB102K	J 1000p	50V Ceramic	AA	C1209	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C334	VCEAPV1CW106M	J 10	16V Electrolytic	AD	C1210	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C335	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC	C1211	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C336	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC	C1212	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C337	VCFRED1HM822J	J 8200p	50V MLFT	AD	C1213	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C338	VCFRED1HM822J	J 8200p	50V MLFT	AD	C1214	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C339	VCFYEC1CM334J	J 0.33	16V MLFT	AE	C1216	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C340	VCFYEC1CM334J	J 0.33	16V MLFT	AE	C1217	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C341	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC	C1219	VCCCCY1HH2R0C	J 2.0p	50V Ceramic	AA
C342	VCEAPV1CW106M	J 10	16V Electrolytic	AD	C1220	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C343	VCEAPV1CW106M	J 10	16V Electrolytic	AD	C1221	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C344	VCEAPV1CW106M	J 10	16V Electrolytic	AD	C1222	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C345	VCKYCY1AF105Z	J 1.0	10V Ceramic	AC	C1223	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C346	VCKYTV1CF105Z	J 1.0	16V Ceramic	AB	C1224	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C347	VCE9PF1CW106M	J 10	16V Elect.(N.P)	AC	C1225	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C348	VCKYTV1CF105Z	J 1.0	16V Ceramic	AB	C1226	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C349	VCKYCY1CF154Z	J 0.15	16V Ceramic	AB	C1227	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C350	VCEAPF1HW475M	J 4.7	50V Electrolytic	AB	C1228	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C351	VCEAPF1HW475M	J 4.7	50V Electrolytic	AB	C1229	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1001	VCEAPV1CW106M	J 10	16V Electrolytic	AD	C1230	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1002	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	C1231	VCKYCY1AF105Z	J 1.0	10V Ceramic	AC
C1003	VCEAPV1VW226M	J 22	35V Electrolytic	AD	C1232	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1004	VCEAPV1EW226M	J 22	25V Electrolytic	AD	C1233	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1005	RC-EZ1138CEZZ	J 10	6.3V Electrolytic	AF	C1233	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1006	VCEAPV1CW106M	J 10	16V Electrolytic	AD	C1303	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1007	VCEAPV1CW106M	J 10	16V Electrolytic	AD	C1304	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1008	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1305	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1009	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	C1306	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1010	VCEAPV1CW106M	J 10	16V Electrolytic	AD	C1307	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1011	VCEAPF1CW106M	J 10	16V Electrolytic	AB	C1308	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1012	VCEAPV1VW226M	J 22	35V Electrolytic	AD	C1309	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1013	VCEAPV1EW226M	J 22	25V Electrolytic	AD	C1310	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1103	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1311	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1104	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1312	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1105	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	C1313	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1106	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	C1314	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1107	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1315	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1108	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1317	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1109	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1318	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1110	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1320	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1111	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	C1321	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1112	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1322	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1113	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1323	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1114	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	C1324	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1115	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA	C1325	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1116	VCCCCY1HH2R0C	J 2.0p	50V Ceramic	AA	C1326	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1117	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1327	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1118	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1328	VCKYCY1AF105Z	J 1.0	10V Ceramic	AC
C1119	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1329	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1120	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1330	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA
C1122	VCCCCY1HH2R0C	J 2.0p	50V Ceramic	AA	C1401	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1123	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1402	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1125	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1403	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1126	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1404	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1127	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1405	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1128	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1406	VCKYCY1CF104Z	J 0.1	16V Ceramic	AA
C1129	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1407	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1130	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1408	VCCCCY1HH101J	J 100p	50V Ceramic	AA
C1131	RC-KZ0416CEZZ	J 10	25V Ceramic	AE	C1409	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
C1132	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1413	VCCCCY1HH5R0C	J 5.0p	50V Ceramic	AA
C1133	VCKYCY1EF104Z	J 0.1	25V Ceramic	AA	C1414	VCCCCY1HH5R0C	J 5.0p	50V Ceramic	AA
					C1415	VCCCCY1HH5R0C	J 5.0p	50V Ceramic	AA
					C1416	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
					C1417	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
					C1418	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
					C1419	RC-KZ0416CEZZ	J 10	25V Ceramic	AE
					C1423	VCCCCY1HH121J	J 120p	50V Ceramic	AA
					C1424	VCCCCY1HH121J	J 120p	50V Ceramic	AA

Ref. No.	Part No.	★	Description	Code
DUNTKA465DE01/02				
OUTPUT UNIT(Continued)				
C1425	VCCCCY1HH121J	J	120p 50V Ceramic	AA
C1426	VCKYCY1AF105Z	J	1.0 10V Ceramic	AC
C1551	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1552	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1553	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1554	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1555	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C1556	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1557	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C1558	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1559	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C1560	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1561	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1562	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1563	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1564	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1565	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1566	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C1567	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C1568	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1569	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1570	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1571	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1572	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1573	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C1611	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1612	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1621	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C1622	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C2601	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C2602	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C2603	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C2604	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C2605	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C2606	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C2607	VCCCCY1HH100D	J	10p 50V Ceramic	AA
C2608	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C2609	VCEAPF1CW107M	J	100 16V Electrolytic	AD
C2610	VCCCCY1HH220J	J	22p 50V Ceramic	AA
C2611	VCCCCY1HH220J	J	22p 50V Ceramic	AA
C2612	RC-KZ0416CEZZ	J	10 16V Mylar	AD
C2613	RC-KZ0416CEZZ	J	10 25V Ceramic	AE
C2614	RC-KZ0416CEZZ	J	10 25V Ceramic	AE
C2622	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C2623	VCEAPF0JW107M	J	100 6.3V Electrolytic	AC
C2624	VCEAPF0JW107M	J	100 6.3V Electrolytic	AC
C2625	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C2627	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C5102	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C5103	VCEAPF0JW107M	J	100 6.3V Electrolytic	AC
C5104	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C5105	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C5107	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C5108	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C5109	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C5110	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C5251	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C5301	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C5302	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C5303	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C5304	VCEAPV0JW476M	J	47 6.3V Electrolytic	AD
C5305	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C5306	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C5307	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C5308	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C5310	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C5314	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C5316	VCCCCY1HH101J	J	100p 50V Ceramic	AA
C5317	VCEAPV0JW476M	J	47 6.3V Electrolytic	AD
C5318	VCEAPF0JW476M	J	47 6.3V Electrolytic	AB
C5319	VCEAPF0JW476M	J	47 6.3V Electrolytic	AB

Ref. No.	Part No.	★	Description	Code
C5320	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C5401	VCEAPF1CW476M	J	47 16V Electrolytic	AC
C5402	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C5403	VCEAPF1CW476M	J	47 16V Electrolytic	AC
C5404	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C5405	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C5406	VCEAPF0JW107M	J	100 6.3V Electrolytic	AC
C7005	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7006	VCEAPV0JW107M	J	100 6.3V Electrolytic	AD
C7007	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7008	VCEAPK0JN227M	J	220 6.3V Electrolytic	AD
C7051	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C7052	VCEAPV1CW476M	J	47 16V Electrolytic	AD
C7053	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7054	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C7055	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C7056	VCEAPV0JW107M	J	100 6.3V Electrolytic	AD
C7057	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7060	VCEAPF1CW106M	J	10 16V Electrolytic	AB
C7061	VCEAPV1CW226M	J	22 16V Electrolytic	AD
C7062	VCEAPV0JW107M	J	100 6.3V Electrolytic	AD
C7063	VCEAPV1CW106M	J	10 16V Electrolytic	AD
C7064	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7065	VCEAPV1CW476M	J	47 16V Electrolytic	AD
C7066	VCEAPV0JW107M	J	100 6.3V Electrolytic	AD
C7067	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7068	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7069	VCEAPV1CW476M	J	47 16V Electrolytic	AD
C7070	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7071	VCEAPF1CW226M	J	22 16V Electrolytic	AB
C7072	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7073	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7074	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7075	VCEAPF1EW336M	J	33 25V Electrolytic	AB
C7076	VCEAPF1CW107M	J	100 16V Electrolytic	AD
C7077	VCEAPF1EW336M	J	33 25V Electrolytic	AB
C7078	VCEAPV0JW107M	J	100 6.3V Electrolytic	AD
C7079	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7080	VCEAPV1CW106M	J	10 16V Electrolytic	AD
C7081	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C7082	VCEAPF1CW226M	J	22 16V Electrolytic	AB
C7083	VCEAPF1CW107M	J	100 16V Electrolytic	AD
C7084	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C7085	VCEAPF1CW226M	J	22 16V Electrolytic	AB
C7086	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7087	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7088	VCEAPF1CW476M	J	47 16V Electrolytic	AC
C7089	VCEAPF1CW107M	J	100 16V Electrolytic	AD
C7090	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7091	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C7092	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C7136	RC-KZ0416CEZZ	J	10 25V Ceramic	AE
C7151	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7152	VCEAPV0JW107M	J	100 6.3V Electrolytic	AD
C7155	VCEAPV1EW336M	J	33 25V Electrolytic	AD
C7156	VCEAPF1CW107M	J	100 16V Electrolytic	AD

RESISTORS

Ref. No.	Part No.	★	Description	Code
R331	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R332	VRS-TX2HF5R6J	J	5.6 1/2W Metal Oxide	AA
R333	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R334	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R335	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R336	VRS-CY1JF104J	J	100k 1/16W Metal Oxide	AA
R337	VRS-CY1JF682J	J	6.8k 1/16W Metal Oxide	AA
R338	VRS-TV1JD222J	J	2.2k 1/16W Metal Oxide	AA
R339	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R340	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R341	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R342	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R343	VRS-CY1JF101J	J	100 1/16W Metal Oxide	AA
R344	VRS-CY1JF104J	J	100k 1/16W Metal Oxide	AA
R345	VRS-CY1JF104J	J	100k 1/16W Metal Oxide	AA
R346	VRS-TV1JD222J	J	2.2k 1/16W Metal Oxide	AA
R347	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKA465DE01/02									
OUTPUT UNIT(Continued)									
R348	VRs-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R1133	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R349	VRs-CY1JF473J	J	47k 1/16W Metal Oxide	AA	R1134	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R350	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA	R1136	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R351	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA	R1137	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R352	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1138	VRs-CB1JF103J	J	10k 1/16W Metal Oxide	AA
R1001	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA	R1139	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1002	VRs-TX2HF4R7J	J	4.7 1/2W Metal Oxide	AB	R1140	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1003	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA	R1141	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1004	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA	R1142	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1005	VRs-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R1143	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1006	VRs-TV1JD000J	J	0 1/16W Metal Oxide	AA	R1144	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1007	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1145	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1008	VRs-CY1JF123F	J	12k 1/16W Metal Oxide	AA	R1147	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1009	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1148	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1010	VRs-CY1JF102F	J	1.0k 1/16W Metal Oxide	AA	R1150	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1011	VRs-CY1JF510F	J	51 1/16W Metal Oxide	AA	R1151	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1012	VRs-CY1JF272J	J	2.7k 1/16W Metal Oxide	AA	R1152	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1013	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1153	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1014	VRs-CY1JF272J	J	2.7k 1/16W Metal Oxide	AA	R1154	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1015	VRs-CY1JF272J	J	2.7k 1/16W Metal Oxide	AA	R1155	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1016	VRs-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA	R1156	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1017	VRs-CY1JF272J	J	2.7k 1/16W Metal Oxide	AA	R1157	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1018	VRs-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA	R1158	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1019	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA	R1159	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1020	VRs-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA	R1161	VRs-CY1JF680J	J	68 1/16W Metal Oxide	AA
R1021	VRs-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA	R1162	VRs-CY1JF680J	J	68 1/16W Metal Oxide	AA
R1022	VRs-CY1JF392J	J	3.9k 1/16W Metal Oxide	AA	R1163	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1023	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1164	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1024	VRs-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R1165	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1025	VRs-CY1JF182J	J	1.8k 1/16W Metal Oxide	AA	R1166	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1026	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA	R1167	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1027	VRs-CY1JF272J	J	2.7k 1/16W Metal Oxide	AA	R1168	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1028	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1169	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1029	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1170	VRs-CY1JF153J	J	15k 1/16W Metal Oxide	AA
R1030	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1171	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1031	VRs-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R1172	VRs-CY1JF271J	J	270 1/16W Metal Oxide	AA
R1032	VRs-CY1JF123F	J	12k 1/16W Metal Oxide	AA	R1176	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1033	VRs-CY1JF102F	J	1.0k 1/16W Metal Oxide	AA	R1177	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1034	VRs-CY1JF221J	J	220 1/16W Metal Oxide	AA	R1178	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1035	VRs-TV1JD4R7J	J	4.7 1/16W Metal Oxide	AA	R1179	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA
R1036	VRs-CY1JF682J	J	6.8k 1/16W Metal Oxide	AA	R1180	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1037	VRs-CY1JF153J	J	15k 1/16W Metal Oxide	AA	R1182	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1038	VRs-CY1JF562J	J	5.6k 1/16W Metal Oxide	AA	R1183	VRs-CY1JF470J	J	47 1/16W Metal Oxide	AA
R1042	VRs-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA	R1184	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA
R1043	VRs-TX2HF4R7J	J	4.7 1/2W Metal Oxide	AB	R1185	VRs-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R1101	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1186	VRs-TV1JD270J	J	27 1/16W Metal Oxide	AA
R1103	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1187	VRs-CY1JF3R3J	J	3.3 1/16W Metal Oxide	AA
R1104	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1188	VRs-CY1JF153J	J	15k 1/16W Metal Oxide	AA
R1105	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1189	VRs-CY1JF272J	J	2.7k 1/16W Metal Oxide	AA
R1106	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA	R1190	VRs-CY1JF3R3J	J	3.3 1/16W Metal Oxide	AA
R1107	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA	R1191	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1108	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA	R1193	VRs-CY1JF271J	J	270 1/16W Metal Oxide	AA
R1109	VRs-CY1JF331J	J	330 1/16W Metal Oxide	AA	R1194	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1111	VRs-CY1JF181J	J	180 1/16W Metal Oxide	AA	R1195	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1112	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA	R1196	VRs-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R1113	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1197	VRs-CY1JF3R3J	J	3.3 1/16W Metal Oxide	AA
R1114	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1198	VRs-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA
R1115	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1199	VRs-CA1JF101J	J	100 1/16W Metal Oxide	AA
R1116	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1201	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1117	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1203	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1118	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1204	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1119	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1205	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1120	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1206	VRs-CY1JF331J	J	330 1/16W Metal Oxide	AA
R1121	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1207	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1122	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1208	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA
R1125	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1209	VRs-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA
R1126	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1211	VRs-CY1JF181J	J	180 1/16W Metal Oxide	AA
R1127	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1212	VRs-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R1128	VRs-CA1JF103J	J	10k 1/16W Metal Oxide	AA	R1213	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1129	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1214	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA
R1130	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA	R1215	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
R1132	VRs-CY1JF101J	J	100 1/16W Metal Oxide	AA	R1216	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
					R1217	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
					R1218	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA
					R1219	VRs-CY1JF000J	J	0 1/16W Metal Oxide	AA

R1306	VRS-CY1JF332J	J	3.3k	1/16W Metal Oxide	AA
R1307	VRS-CY1JF331J	J	330	1/16W Metal Oxide	AA
R1308	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1309	VRS-CY1JF332J	J	3.3k	1/16W Metal Oxide	AA
R1311	VRS-CY1JF181J	J	180	1/16W Metal Oxide	AA
R1312	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1313	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1314	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1315	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1316	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1317	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1318	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1319	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1320	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1321	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1323	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1326	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1327	VRS-CA1JF103J	J	10k	1/16W Metal Oxide	AA
R1328	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1330	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1331	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1332	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1333	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1334	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1336	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1337	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1338	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1339	VRS-CB1JF103J	J	10k	1/16W Metal Oxide	AA
R1340	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1341	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1342	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1343	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1345	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1346	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1347	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1349	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1350	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1351	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1352	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1353	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1354	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1355	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1356	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1357	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1358	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1359	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1360	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1361	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1362	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1363	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1364	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1365	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1366	VRS-CY1JF560J	J	56	1/16W Metal Oxide	AA
R1367	VRS-CY1JF560J	J	56	1/16W Metal Oxide	AA
R1368	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1371	VRS-CY1JF470J	J	47	1/16W Metal Oxide	AA
R1372	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1373	VRS-CY1JF332J	J	3.3k	1/16W Metal Oxide	AA
R1374	VRS-CY1JF332J	J	3.3k	1/16W Metal Oxide	AA
R1375	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1377	VRS-CY1JF102J	J	1.0k	1/16W Metal Oxide	AA
R1378	VRS-TV1JD270J	J	27	1/16W Metal Oxide	AA
R1379	VRS-CY1JF272J	J	2.7k	1/16W Metal Oxide	AA
R1381	VRS-CY1JF000J	J	0	1/16W Metal Oxide	AA
R1382	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1383	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1384	VRS-CY1JF101J	J	100	1/16W Metal Oxide	AA
R1385	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1386	VRS-CY1JF222J	J	2.2k	1/16W Metal Oxide	AA
R1387	VRS-CY				

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKA465DE01/02					R1576	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
OUTPUT UNIT(Continued)					R1577	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R1393	VRS-CY1JF3R3J	J 3.3	1/16W Metal Oxide	AA	R1578	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R1394	VRS-CY1JF3R3J	J 3.3	1/16W Metal Oxide	AA	R1579	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R1395	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R1580	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R1396	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R1581	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1397	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA	R1582	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R1398	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA	R1583	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1399	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA	R1584	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1401	VRS-CY1JF223J	J 22k	1/16W Metal Oxide	AA	R1585	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1402	VRS-CY1JF223J	J 22k	1/16W Metal Oxide	AA	R1586	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1403	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1587	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1404	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1588	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R1405	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1625	VRS-CY1JF471J	J 470	1/16W Metal Oxide	AA
R1406	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1626	VRS-CY1JF471J	J 470	1/16W Metal Oxide	AA
R1407	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R1627	VRS-CY1JF471J	J 470	1/16W Metal Oxide	AA
R1408	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1631	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R1409	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1632	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R1410	VRS-CY1JF332J	J 3.3k	1/16W Metal Oxide	AA	R1633	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R1411	VRS-CY1JF332J	J 3.3k	1/16W Metal Oxide	AA	R1634	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1412	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA	R1635	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1413	VRS-CY1JF332J	J 3.3k	1/16W Metal Oxide	AA	R1636	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1414	VRS-CY1JF332J	J 3.3k	1/16W Metal Oxide	AA	R1637	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1415	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA	R1638	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1416	VRS-CY1JF332J	J 3.3k	1/16W Metal Oxide	AA	R1639	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1417	VRS-CY1JF332J	J 3.3k	1/16W Metal Oxide	AA	R1670	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R1418	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1671	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R1419	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1672	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R1420	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1673	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R1421	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA	R1674	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1422	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1675	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1423	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R1676	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1425	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1678	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1426	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1679	VRS-CY1JF750J	J 75	1/16W Metal Oxide	AA
R1427	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA	R1680	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1428	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R1681	VRS-CY1JF750J	J 75	1/16W Metal Oxide	AA
R1429	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA	R1682	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1430	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R1683	VRS-CY1JF750J	J 75	1/16W Metal Oxide	AA
R1431	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2101	VRS-CY1JF3R3J	J 3.3	1/16W Metal Oxide	AA
R1432	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA	R2102	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1433	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA	R2103	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1434	VRS-CY1JF181J	J 180	1/16W Metal Oxide	AA	R2104	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1435	VRS-CY1JF181J	J 180	1/16W Metal Oxide	AA	R2105	VRS-CY1JF331J	J 330	1/16W Metal Oxide	AA
R1436	VRS-CY1JF181J	J 180	1/16W Metal Oxide	AA	R2106	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1441	VRS-CY1JF470J	J 47	1/16W Metal Oxide	AA	R2107	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1442	VRS-CY1JF470J	J 47	1/16W Metal Oxide	AA	R2108	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1443	VRS-CY1JF470J	J 47	1/16W Metal Oxide	AA	R2109	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1444	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA	R2110	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1445	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA	R2111	VRS-CY1JF331J	J 330	1/16W Metal Oxide	AA
R1446	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA	R2112	VRS-CY1JF3R3J	J 3.3	1/16W Metal Oxide	AA
R1447	VRS-CY1JF392J	J 3.9k	1/16W Metal Oxide	AA	R2113	VRS-CY1JF3R3J	J 3.3	1/16W Metal Oxide	AA
R1448	VRS-CY1JF102J	J 1.0k	1/16W Metal Oxide	AA	R2114	VRS-CY1JF222J	J 2.2k	1/16W Metal Oxide	AA
R1555	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2115	VRS-CA1JF101J	J 100	1/16W Metal Oxide	AA
R1556	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA	R2116	VRS-CY1JF331J	J 330	1/16W Metal Oxide	AA
R1557	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA	R2117	VRS-CY1JF682J	J 6.8k	1/16W Metal Oxide	AA
R1558	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2118	VRS-CY1JF3R3J	J 3.3	1/16W Metal Oxide	AA
R1559	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA	R2119	VRS-CY1JF3R3J	J 3.3	1/16W Metal Oxide	AA
R1560	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA	R2120	VRS-CY1JF3R3J	J 3.3	1/16W Metal Oxide	AA
R1561	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA	R2121	VRS-CY1JF3R3J	J 3.3	1/16W Metal Oxide	AA
R1562	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA	R2122	VRS-CA1JF101J	J 100	1/16W Metal Oxide	AA
R1563	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2123	VRS-CY1JF682J	J 6.8k	1/16W Metal Oxide	AA
R1564	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2124	VRS-CY1JF682J	J 6.8k	1/16W Metal Oxide	AA
R1565	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2125	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1566	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2126	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1567	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA	R2127	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1568	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA	R2128	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R1569	VRS-CY1JF472J	J 4.7k	1/16W Metal Oxide	AA	R2129	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R1570	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2130	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R1571	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2131	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R1572	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2132	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R1573	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2133	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R1574	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA	R2134	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R1575	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA	R2135	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
					R2136	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
					R2137	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA

R2643	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R2644	VRS-CY1JF100J	J 10	1/16W Metal Oxide	AA
R2645	VRS-CY1JF562J	J 5.6k	1/16W Metal Oxide	AA
R2646	VRS-CB1JF104J	J 100k	1/16W Metal Oxide	AA
R2647	VRS-CY1JF332J	J 3.3k	1/16W Metal Oxide	AA
R2650	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R2651	VRS-CY1JF562J	J 5.6k	1/16W Metal Oxide	AA
R2652	VRS-CY1JF562J	J 5.6k	1/16W Metal Oxide	AA
R2654	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R2655	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R2656	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R2657	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA
R2659	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2661	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2662	VRS-CY1JF104J	J 100k	1/16W Metal Oxide	AA
R2663	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2664	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R2665	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R2666	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R2667	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R2671	VRS-TW2ED151J	J 150	1/4W Metal Oxide	AA
R2672	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R2673	VRS-TW2ED000J	J 0	1/4W Metal Oxide	AB
R2674	VRS-TW2ED151J	J 150	1/4W Metal Oxide	AA
R2675	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2676	VRS-CB1JF101J	J 100	1/16W Metal Oxide	AA
R2677	VRS-CB1JF101J	J 100	1/16W Metal Oxide	AA
R2678	VRS-TW2ED151J	J 150	1/4W Metal Oxide	AA
R2679	VRS-TW2ED561J	J 560	1/4W Metal Oxide	AA
R2680	VRS-TW2ED561J	J 560	1/4W Metal Oxide	AA
R2681	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2682	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2683	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2684	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2685	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2687	VRS-TW2ED561J	J 560	1/4W Metal Oxide	AA
R2688	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2689	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2690	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2691	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2692	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R2697	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5103	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5104	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5105	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5106	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5107	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5108	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5109	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5110	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5254	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5255	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5257	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5301	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5302	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5303	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5304	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5305	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5306	VRS-CY1JF103J	J 10k	1/16W Metal Oxide	AA
R5307	VRS-CY1JF472J	J 4.7k	1/16W Metal Oxide	AA
R5308	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5309	VRS-CY1JF472J	J 4.7k	1/16W Metal Oxide	AA
R5310	VRS-CY1JF272J	J 2.7k	1/16W Metal Oxide	AA
R5311	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5312	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5313	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5314	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA
R5315	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5316	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5317	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5318	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5319	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5320	VRS-CY1JF000J	J 0	1/16W Metal Oxide	AA
R5322	VRS-CY1JF101J	J 100	1/16W Metal Oxide	AA

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
DUNTKA465DE01/02									
OUTPUT UNIT(Continued)									
R5325	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA	R5471	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5326	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA	R7007	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5327	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA	R7008	VR5-TX2HF000J	J	0 1/2W Metal Oxide	AA
R5328	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA	R7010	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5329	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7051	VR5-TV1JD000J	J	0 1/16W Metal Oxide	AA
R5330	VR5-CY1JF272J	J	2.7k 1/16W Metal Oxide	AA	R7054	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R5331	VR5-CY1JF121J	J	120 1/16W Metal Oxide	AA	R7055	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5332	VR5-CY1JF121J	J	120 1/16W Metal Oxide	AA	R7056	VR5-TV1JD000J	J	0 1/16W Metal Oxide	AA
R5333	VR5-CY1JF272J	J	2.7k 1/16W Metal Oxide	AA	R7057	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5335	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7058	VR5-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB
R5336	VR5-TV1JD121J	J	120 1/16W Metal Oxide	AA	R7059	VR5-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB
R5337	VR5-TV1JD121J	J	120 1/16W Metal Oxide	AA	R7060	VR5-CY1JF821J	J	820 1/16W Metal Oxide	AA
R5338	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7061	VR5-CR3AD4R7J	J	4.7 1W Metal Oxide	AC
R5339	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R7062	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5341	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA	R7063	VR5-TX2HF000J	J	0 1/2W Metal Oxide	AA
R5344	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA	R7064	VR5-TV1JD000J	J	0 1/16W Metal Oxide	AA
R5346	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7066	VR5-CR3AD4R7J	J	4.7 1W Metal Oxide	AC
R5347	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA	R7067	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5348	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7069	VR5-CY1JF331J	J	330 1/16W Metal Oxide	AA
R5350	VR5-CY1JF823J	J	82k 1/16W Metal Oxide	AA	R7071	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R5351	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7072	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5352	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7073	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5353	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA	R7074	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5358	VRN-CY1JF472D	J	4.7k 1/16W Metal Film	AA	R7075	VR5-TX2HF1R0J	J	1.0 1/2W Metal Oxide	AA
R5362	VRN-CY1JF272D	J	2.7k 1/16W Metal Film	AB	R7076	VR5-TX2HF1R0J	J	1.0 1/2W Metal Oxide	AA
R5363	VRN-CY1JF392D	J	3.9k 1/16W Metal Film	AA	R7078	VR5-CY1JF331J	J	330 1/16W Metal Oxide	AA
R5366	VRN-CY1JF272D	J	2.7k 1/16W Metal Film	AB	R7079	VR5-TQ2BD000J	J	0 1/8W Metal Oxide	AA
R5369	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7080	VR5-TQ2BD000J	J	0 1/8W Metal Oxide	AA
R5370	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R7081	VR5-CY1JF223J	J	22k 1/16W Metal Oxide	AA
R5401	VR5-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA	R7082	VR5-CY1JF393J	J	39k 1/16W Metal Oxide	AA
R5402	VR5-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA	R7083	VR5-CB1JF102J	J	1.0k 1/16W Metal Oxide	AA
R5403	VR5-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA	R7084	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA
R5404	VR5-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA	R7085	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA
R5407	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7086	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA
R5410	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7087	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA
R5413	VR5-CY1JF183F	J	18k 1/16W Metal Oxide	AA	R7088	VR5-CY1JF393J	J	39k 1/16W Metal Oxide	AA
R5415	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7089	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA
R5416	VR5-CY1JF222J	J	2.2k 1/16W Metal Oxide	AA	R7090	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R5418	VR5-CY1JF473J	J	47k 1/16W Metal Oxide	AA	R7091	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA
R5419	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7092	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA
R5420	VR5-CY1JF332J	J	3.3k 1/16W Metal Oxide	AA	R7094	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA
R5421	VR5-CY1JF473J	J	47k 1/16W Metal Oxide	AA	R7095	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA
R5422	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7096	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5423	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7103	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R5424	VR5-CY1JF473J	J	47k 1/16W Metal Oxide	AA	R7104	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA
R5426	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA	R7105	VR5-CY1JF122J	J	1.2k 1/16W Metal Oxide	AA
R5427	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA	R7106	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5428	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA	R7109	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5429	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA	R7110	VR5-CY1JF822F	J	8.2k 1/16W Metal Oxide	AA
R5430	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA	R7111	VR5-CY1JF472F	J	4.7k 1/16W Metal Oxide	AA
R5431	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA	R7112	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5432	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA	R7113	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA
R5433	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA	R7114	VR5-CY1JF822F	J	8.2k 1/16W Metal Oxide	AA
R5436	VR5-CY1JF473J	J	47k 1/16W Metal Oxide	AA	R7115	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R5437	VR5-CY1JF473J	J	47k 1/16W Metal Oxide	AA	R7116	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R5438	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7118	VR5-CY1JF103F	J	10k 1/16W Metal Oxide	AA
R5439	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7120	VR5-CY1JF103F	J	10k 1/16W Metal Oxide	AA
R5440	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7121	VR5-CY1JF122F	J	1.2k 1/16W Metal Oxide	AA
R5441	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7123	VR5-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R5451	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7124	VR5-CY1JF122F	J	1.2k 1/16W Metal Oxide	AA
R5452	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R7125	VR5-TX2HF3R9J	J	3.9 1/2W Metal Oxide	AB
R5453	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R7126	VR5-TX2HF3R9J	J	3.9 1/2W Metal Oxide	AB
R5454	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7127	VR5-CY1JF153J	J	15k 1/16W Metal Oxide	AA
R5456	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7128	VR5-CY1JF472F	J	4.7k 1/16W Metal Oxide	AA
R5457	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R7129	VR5-CY1JF122F	J	1.2k 1/16W Metal Oxide	AA
R5458	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7130	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA
R5460	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R7131	VR5-CY1JF472F	J	4.7k 1/16W Metal Oxide	AA
R5462	VR5-CY1JF101J	J	100 1/16W Metal Oxide	AA	R7132	VR5-CY1JF473F	J	47k 1/16W Metal Oxide	AA
R5464	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R7133	VR5-CY1JF184J	J	180k 1/16W Metal Oxide	AA
R5465	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA	R7134	VR5-CY1JF272F	J	2.7k 1/16W Metal Oxide	AA
R5468	VR5-CY1JF000J	J	0 1/16W Metal Oxide	AA	R7135	VR5-CY1JF472J	J	4.7k 1/16W Metal Oxide	AA
					R7151	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
					R7156	VR5-CY1JF103J	J	10k 1/16W Metal Oxide	AA
					R7157	VR5-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB
					R7158	VR5-TX2HF2R2J	J	2.2 1/2W Metal Oxide	AB

Ref. No.	Part No.	★	Description	Code
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OUTPUT UNIT(Continued)

MISCELLANEOUS PARTS

FB1108	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1109	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1110	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1111	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1112	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1113	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1201	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1202	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1203	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1204	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1205	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1206	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1301	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1302	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1303	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1304	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1305	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1306	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1401	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB1402	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB2601	RBLN-0030TAZZ	J	Ferrite Bead	AB
FB2602	RBLN-0030TAZZ	J	Ferrite Bead	AB
FB2613	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB2614	RBLN-0062TAZZ	J	Ferrite Bead	AB
FB2615	RBLN-0062TAZZ	J	Ferrite Bead	AB
FB5301	RBLN-0059CEZZ	J	Ferrite Bead	AB
FB5302	RBLN-0067CEZZ	J	Ferrite Bead	AC
FB5305	RBLN-0067CEZZ	J	Ferrite Bead	AC
FB7051	RBLN-0065CEZZ	J	Ferrite Bead	AB
FB7052	RBLN-0065CEZZ	J	Ferrite Bead	AB
FB7053	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB7054	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB7055	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB7056	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB7059	RBLN-0065CEZZ	J	Ferrite Bead	AB
FB7060	RBLN-0065CEZZ	J	Ferrite Bead	AB
FB7061	RBLN-0006TAZZ	J	Ferrite Bead	AB
FB7062	RBLN-0006TAZZ	J	Ferrite Bead	AB
P301	QPLGN0764TAZZ	J	Plug 7-Pin(SQ)	AD
P1301	QPLGN0764TAZZ	J	Plug 7-PIN(TPI)	AD
P2601	QPLGN1363TAZZ	J	Plug 13-PIN(GY)	AD
P2612	QPLGN0763TAZZ	J	Plug 7-Pin	AD
P4301	QCNCM3021TAZZ	J	Plug 30-Pin	AL
P4302	QCNCM2021TAZZ	J	Plug 20-Pin	AH
P4303	QCNCM2021TAZZ	J	Plug 20-Pin	AH
P5101	QPLGN0464TAZZ	J	Plug 4-Pin(AZ)	AC
P5301	QPLGN0174FJZZ	J	Plug 2-Pin(F)	AC
P5303	QPLGN0364TAZZ	J	Plug 3-Pin(RA)	AC
P7051	QPLGN0179FJZZ	J	Plug 7-Pin	AD
P7052	QPLGN0174FJZZ	J	Plug 2-Pin(Q)	AC
P7053	QPLGN0264TAZZ	J	Plug 2-Pin(LF)	AC
P7055	QPLGN0175FJZZ	J	Plug 3-Pin(FC)	AD
P7056	QPLGN0364TAZZ	J	Plug 3-Pin(FD)	AC
P7057	QPLGN0175FJZZ	J	Plug 3-Pin(FF)	AD
SC1101	QSOCN3271TAZZ	J	Socket 32-Pin(RP)	AE
SC1201	QSOCN3271TAZZ	J	Socket 32-Pin(GP)	AE
SC1302	QSOCN3271TAZZ	J	Socket 32-Pin(BP)	AE
SC2601	QSOCN1897REZZ	J	Socket 36-Pin(KY)	AE
SC7202	QCNCW6028CEZZ	J	Socket 60-Pin	AL
SC8404	QCNCW6028CEZZ	J	Socket 60-Pin	AL
SC8405	QCNCW6028CEZZ	J	Socket 60-Pin	AL
SC8502	QCNCW6028CEZZ	J	Socket 60-Pin	AL
SW2601	QSW-K0065GEZZ	J	Key Switch	AC
	PSLDM4663CEFW	J	Shield	AN

Ref. No.	Part No.	★	Description	Code
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DUNTKA466DE01/02

OUTPUT SUB UNIT

INTEGRATED CIRCUITS

IC7201	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC7202	VHiPQ20VZ11-1	J	PQ20VZ11	AH
IC7203	VHiPQ20VZ11-1	J	PQ20VZ11	AH

DIODES

D7201	VHDDAN202K/-1	J	Diode	AB
D7202	VHDDAN202K/-1	J	Diode	AB
D7203	VHDDAN202K/-1	J	Diode	AB

CAPACITORS

C7201	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C7202	VCKYCY1HB103K	J	0.01 50V Ceramic	AA
C7203	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C7204	VCEAPV1CW476M	J	47 16V Electrolytic	AD
C7205	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C7206	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7207	VCEAPF1CW107M	J	100 16V Electrolytic	AD
C7208	VCEAPF1EW336M	J	33 25V Electrolytic	AB
C7209	VCEAPV1CW336M	J	33 16V Electrolytic	AD
C7210	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7213	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA

RESISTORS

R7201	VRS-CY1JF102J	J	1.0k 1/16W Metal Oxide	AA
R7202	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R7203	VRS-CR3AD2R2J	J	2.2 1W Metal Oxide	AC
R7204	VRS-CR3AD2R2J	J	2.2 1W Metal Oxide	AC
R7205	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R7206	VRS-CY1JF153F	J	15k 1/16W Metal Oxide	AA
R7207	VRS-CY1JF333F	J	33k 1/16W Metal Oxide	AA
R7208	VRS-CY1JF122F	J	1.2k 1/16W Metal Oxide	AA
R7209	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R7210	VRS-CY1JF472F	J	4.7k 1/16W Metal Oxide	AA
R7211	VRS-CY1JF103F	J	10k 1/16W Metal Oxide	AA
R7213	VRS-CY1JF122F	J	1.2k 1/16W Metal Oxide	AA
R7216	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R7217	VRS-CY1JF103F	J	10k 1/16W Metal Oxide	AA
R7219	VRS-CY1JF122F	J	1.2k 1/16W Metal Oxide	AA
R7220	VRS-CY1JF472F	J	4.7k 1/16W Metal Oxide	AA
R7223	VRS-CR3AD2R2J	J	2.2 1W Metal Oxide	AC
R7224	VRS-CR3AD2R2J	J	2.2 1W Metal Oxide	AC

MISCELLANEOUS PARTS

FB7201	RBLN-0065CEZZ	J	Ferrite Bead	AB
FB7202	RBLN-0065CEZZ	J	Ferrite Bead	AB
FB7203	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB7204	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB7205	RBLN-0062CEZZ	J	Ferrite Bead	AC
FB7206	RBLN-0065CEZZ	J	Ferrite Bead	AB
FB7207	RBLN-0065CEZZ	J	Ferrite Bead	AB
FB7208	RBLN-0065CEZZ	J	Ferrite Bead	AB
FB7209	RBLN-0006TAZZ	J	Ferrite Bead	AB
P7201	QPLGN0394FJZZ	J	Plug 22-Pin(EA)	AD
P7202	QCNCM6054TAZZY	J	Plug 60-Pin	AK
P7203	QPLGN0176FJZZ	J	Plug 4-Pin(FA)	AD
P7204	QPLGN0175FJZZ	J	Plug 3-Pin(FB)	AD
P7205	QPLGN0464TAZZ	J	Plug 4-Pin(D)	AC
P7206	QPLGN0364TAZZ	J	Plug 3-Pin(FE)	AC

Ref. No.	Part No.	★	Description	Code
DUNTKA467DE01/02				
SOUND OUT UNIT				
INTEGRATED CIRCUIT				
IC301	VHiTDA1517/-2	J	TDA1517/N2	AL
CAPACITORS				
C303	VCE9PF1CW475M	J	4.7 16V Elect.(N.P)	AC
C304	VCEAPF1CW107M	J	100 16V Electrolytic	AD
C305	VCEA2A1CW108M	J	1000 16V Electrolytic	AB
C306	VCKYCY1EF104Z	J	0.1 25V Ceramic	AA
C307	VCEA2A1CW108M	J	1000 16V Electrolytic	AB
C308	VCEAPF1EW475M	J	4.7 25V Electrolytic	AB
C309	VCEA2A1EW477M	J	470 25V Electrolytic	AD
C310	VCE9PF1CW475M	J	4.7 16V Elect.(N.P)	AC
RESISTORS				
R301	VRS-CY1JF392J	J	3.9k 1/16W Metal Oxide	AA
R302	VRS-CY1JF392J	J	3.9k 1/16W Metal Oxide	AA
R304	QFS-J2521CEZZ	J	Fuse Resistor	AF
R305	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R306	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
MISCELLANEOUS PARTS				
FB301	RBLN-0060CEZZ	J	Ferrite Bead	AC
P302	QPLGN0176FJZZ	J	Plug 7-Pin(SO)	AD
P303	QPLGN0764TAZZ	J	Plug 4-Pin(SP)	AD

DUNTKA468DE01/02				
DC/DC CONVERTER UNIT				
INTEGRATED CIRCUIT				
IC7301	RCNVD0014CEZZ	J	IC	BK
TRANSISTORS				
Q7301	VSDTC144EK/-1	J	DTC144EK	AB
Q7302	VSDTC144EK/-1	J	DTC144EK	AB
CAPACITORS				
C7301	RC-KZ0416CEZZ	J	10 25V Ceramic	AE
C7302	RC-EZ1147CEZZ	J	47 10V Electrolytic	AG
C7303	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7304	RC-EZ1147CEZZ	J	47 10V Electrolytic	AG
C7305	VCKYCY1CF104Z	J	0.1 16V Ceramic	AA
C7306	RC-EZ1147CEZZ	J	47 10V Electrolytic	AG
C7309	RC-KZ0416CEZZ	J	10 25V Ceramic	AE
RESISTORS				
R7301	VRS-CY1JF103J	J	10k 1/16W Metal Oxide	AA
R7302	VRS-CY1JF122J	J	1.2k 1/16W Metal Oxide	AA
R7308	VRS-CY1JF000J	J	0 1/16W Metal Oxide	AA
R7309	VRS-CY1JF100F	J	10 1/16W Metal Oxide	AA
R7310	VRS-CY1JF221F	J	220 1/16W Metal Oxide	AA
R7311	VRN-RV3ABR47J	J	0.47 1W Metal Film	AB
R7312	VRN-RV3ABR47J	J	0.47 1W Metal Film	AB
MISCELLANEOUS PARTS				
P7301	QPLGN0179FJZZ	J	Plug 7-Pin(ED)	AD
P7302	QPLGN0176FJZZ	J	Plug 4-Pin	AD
	LANGT3301CEFW	J	Angle	AD
	XBPSD30P06R00	J	Screw	AB

Ref. No.	Part No.	★	Description	Code
DUNTKA469DE01/02				
R/C RECEIVER UNIT				
CAPACITOR				
C5591	VCEAPF0JW107M	J	100 6.3V Electrolytic	AC
RESISTORS				
R5591	VRS-CY1JF471J	J	470 1/16W Metal Oxide	AA
R5592	VRS-CY1JF220J	J	22 1/16W Metal Oxide	AA
MISCELLANEOUS PARTS				
P5591	QPLGN0364TAZZ	J	Plug 3-Pin(RA)	AC
RM5591	RRMCU0239CEZZ	J	R/C Receiver	AG
	PSLDC3117CEFW	J	Shield Case	AC

RUNTK0699CEZZ				
ACINLET UNIT				
PACKAGED CIRCUIT				
△ TNR791	9FJ0F20001280	J	ENE471D10A	AD
COIL				
△ L791	9FJ0L05001520	J	Balun Transformer	
△ L792	9FJ0L05001520	J	Balun Transformer	
CAPACITORS				
△ C791	9FJ0C34001783	J	0.47 275V M.Polyester	
△ C792	9FJ0C51001223	J	1000p 250V Ceramic	AD
△ C793	9FJ0C51001223	J	1000p 250V Ceramic	AD
△ C794	9FJ0C34001693	J	0.1 275V M.Polyester	
RESISTOR				
R791	9FJ0R11002110	J	470k 1/4W Special	AC
MISCELLANEOUS PARTS				
△ F791	9FJ0E02101040	J	Fuse 6.3A 250V	AF
	9FJ0E09010010	J	Fuse Holder	AC
CN791	9FJ0G10003930	J	3-pin (PA), S2P3VH	AD
△	9FJ0G10004260	J	AC Inlet	AK
			NC-174-10N-DL6-BL	

Ref. No.	Part No.	★	Description	Code
RDENC0327CEZZ				
POWER UNIT				
INTEGRATED CIRCUITS				
IC701	9FJ0F09001090	J	IPD	
IC702	9FJ0F01102001	J	Regulator	AF
△ IC703	9FJ0F01901370	J	IC	AW
△ IC704	9FJ0F01901340	J	IC	AQ
IC705	9FJ0F01102001	J	Regulator	AF
IC706	9FJ0F01102520	J	Regulator	
TRANSISTORS				
△ Q701	9FJ0Q11001592	J	FET,K2837	AU
△ Q702	9FJ0Q11010702	J	FET,FS7KM18A	
Q703	9FJ0Q02001725	J	2SC4409(TE12L)	AE
Q704	9FJ0Q09001305	J	RN1427	
DIODES				
D701	9FJ0D01010065	J	Diode,AU01AV0	AC
△ D702	9FJ0D14001010	J	Bridge,D10XB60H	
D703	9FJ0D04001000	J	Diode,D5L60	AG
D704	9FJ0D01001465	J	Diode,AK04	
D705	9FJ0D01010135	J	Diode,EG01CV0	
D706	9FJ0D01001115	J	Diode,AG01ZV0	AD
D707	9FJ0D01001465	J	Diode,AK04	
D708	9FJ0D01001115	J	Diode,AG01ZV0	AD
D709	9FJ0D01001115	J	Diode,AG01ZV0	AD
D710	9FJ0D01001115	J	Diode,AG01ZV0	AD
D711	9FJ0D01001115	J	Diode,AG01ZV0	AD
D712	9FJ0D01001465	J	Diode,AK04	
D713	9FJ0D01001115	J	Diode,AG01ZV0	AD
D714	9FJ0D23010022	J	Stack,FMX12S	AH
D715	9FJ0D24001200	J	Diode,FMBG16L	AH
D716	9FJ0D23010022	J	Stack,FMX12S	AH
D717	9FJ0D01001115	J	Diode,AG01ZV0	AD
D718	9FJ0D01001115	J	Diode,AG01ZV0	AD
D719	9FJ0D01001115	J	Diode,AG01ZV0	AD
D720	9FJ0D01001115	J	Diode,AG01ZV0	AD
D721	9FJ0D01001115	J	Diode,AG01ZV0	AD
D722	9FJ0D01001465	J	Diode,AK04	
D723	9FJ0D01001115	J	Diode,AG01ZV0	AD
ZD701	9FJ0D31181625	J	Zener Diode,RD10JSAB2TA	AD
ZD702	9FJ0D31181675	J	Zener Diode,RD18JSAB2TA	AC
ZD703	9FJ0D31181695	J	Zener Diode,RD24JSAB2TA	AC
PACKAGED CIRCUITS				
△ PC701	9FJ0F10010931	J	Photo Coupler	AG
△ PC702	9FJ0F10010931	J	Photo Coupler	AG
△ PC703	9FJ0F10010931	J	Photo Coupler	AG
COILS AND TRANSFORMER				
△ L701	9FJ0L08001870	J	Inductor	AH
L702	9FJ0L08001980	J	Inductor	
B701	9FJ0L08001805	J	Inductor,B01AT1F	
△ T701	9FJ0L00002200	J	Transformer	
△ T702	9FJ0L00002190	J	Transformer	
CAPACITORS				
C701	9FJ0C01701590	J	4.7 400V Electrolytic	
C702	9FJ0C500010895	J	0.1 25V Ceramic	
C703	9FJ0C01102095	J	1000 10V Electrolytic	
C704	9FJ0C50004405	J	0.1 50V Ceramic	AB
C705	9FJ0C50004405	J	0.1 50V Ceramic	AB
C707	9FJ0C32401010	J	0.47 400V M.Polyester	AK
C708	9FJ0C32410040	J	2.2 400V M.Polyester	AN
C709	9FJ0C500011465	J	470p 50V Ceramic	AC
C710	9FJ0C50003455	J	470p 250V Ceramic	AK
C711	9FJ0C50004775	J	1 16V Ceramic	
C712	9FJ0C500011465	J	470p 50V Ceramic	AC
C713	9FJ0C50004455	J	0.01 50V Ceramic	
C714	9FJ0C500011465	J	470p 50V Ceramic	AC
C715	9FJ0C50004375	J	68p 50V Ceramic	AC
C716	9FJ0C50004365	J	0.15 25V Ceramic	AC

Ref. No.	Part No.	★	Description	Code
C717	9FJ0C50004365	J	0.15 25V Ceramic	AC
C718	9FJ0C50004455	J	0.01 50V Ceramic	
C719	9FJ0C01510165	J	47 50V Electrolytic	AC
C720	9FJ0C02801683	J	270 400V Electrolytic	
C721	9FJ0C50002910	J	4700p 500V Ceramic	AE
△ C722	9FJ0C50010715	J	220p 1kV Ceramic	AD
C723	9FJ0C50010705	J	470p 1kV Ceramic	AD
C724	9FJ0C50004455	J	0.01 50V Ceramic	
C725	9FJ0C50004715	J	1500p 50V Ceramic	
C726	9FJ0C01510115	J	2.2 50V Electrolytic	AC
C727	9FJ0C50004725	J	2200p 50V Ceramic	
C728	9FJ0C01510155	J	33 50V Electrolytic	
C729	9FJ0C01510145	J	22 50V Electrolytic	AC
△ C730	9FJ0C51001223	J	1000p 250V Ceramic	AD
C731	9FJ0C50002985	J	1000p 500V Ceramic	AD
C732	9FJ0C01302195	J	47 25V Electrolytic	
C733	9FJ0C50004405	J	0.1 50V Ceramic	AB
C734	9FJ0C50002985	J	1000p 500V Ceramic	AD
C735	9FJ0C01102095	J	1000 10V Electrolytic	
C736	9FJ0C01102095	J	1000 10V Electrolytic	
C737	9FJ0C50004455	J	0.01 50V Ceramic	
C738	9FJ0C50004405	J	0.1 50V Ceramic	AB
C739	9FJ0C50002985	J	1000p 500V Ceramic	AD
C740	9FJ0C01302195	J	470 25V Electrolytic	
C741	9FJ0C01302195	J	470 25V Electrolytic	
C742	9FJ0C50004405	J	0.1 50V Ceramic	AB
C743	9FJ0C01302195	J	470 25V Electrolytic	
C744	9FJ0C01510165	J	470 25V Electrolytic	AC
C745	9FJ0C50004405	J	0.1 50V Ceramic	AB
C746	9FJ0C50003635	J	100p 1kV Ceramic	AD
C748	9FJ0C50003635	J	100p 1kV Ceramic	AD
C749	9FJ0C50003635	J	100p 1kV Ceramic	AD
RESISTORS				
R701	9FJ0R94300015	J	47 1/2W Chip	
R702	9FJ0R91201165	J	220 1/10W Chip	AB
R703	9FJ0R91001025	J	10k 1/10W Chip	
△ R704	9FJ0R22001430	J	0.1 5W Cement	AF
R705	9FJ0R91001375	J	2.2k 1/10W Chip	
R706	9FJ0R91001215	J	12k 1/10W Chip	
R707	9FJ0R94201455	J	56k 1/2W Chip	
R708	9FJ0R94201455	J	56k 1/2W Chip	
R709	9FJ0R91201245	J	1k 1/2W Chip	AB
R710	9FJ0R94201325	J	4.7k 1/2W Chip	
△ R711	9FJ0R70000034	J	10 Fuse Resister	AK
R712	9FJ0R17070491	J	10 2W Metal Oxide	AC
△ R713	9FJ0R89201915	J	0.22 1W Metal Oxide	AC
R714	9FJ0R91201565	J	470k 1/10W Chip	AB
R715	9FJ0R91201565	J	470k 1/10W Chip	AB
R716	9FJ0R91201565	J	470k 1/10W Chip	AB
R717	9FJ0R91202725	J	6.2k 1/10W Chip	
R718	9FJ0R91201055	J	27 1/10W Chip	AB
R719	9FJ0R91201055	J	27 1/10W Chip	AB
R720	9FJ0R91201365	J	10k 1/10W Chip	AB
R721	9FJ0R91201405	J	22k 1/10W Chip	AB
R722	9FJ0R91201485	J	100k 1/10W Chip	AB
R723	9FJ0R94201085	J	47 1/2W Chip	
R724	9FJ0R91210025	J	51k 1/10W Chip	
R725	9FJ0R91201425	J	33k 1/10W Chip	AB
R726	9FJ0R94201005	J	10 1/2W Chip	AC
R727	9FJ0R91001185	J	39k 1/10W Chip	
R728	9FJ0R91001115	J	6.8k 1/10W Chip	
R729	9FJ0R91010045	J	5.6k 1/10W Chip	
R730	9FJ0R91001305	J	150k 1/10W Chip	
R731	9FJ0R91001225	J	470k 1/10W Chip	AB
R732	9FJ0R91001225	J	470k 1/10W Chip	AB
R733	9FJ0R91001225	J	470k 1/10W Chip	AB
R734	9FJ0R91001225	J	470k 1/10W Chip	AB
R735	9FJ0R91001225	J	470k 1/10W Chip	AB
R736	9FJ0R91001225	J	470k 1/10W Chip	AB
R737	9FJ0R17071451	J	100k 2W Metal Oxide	AC
R738	9FJ0R94201455	J	56k 1/2W Chip	
R739	9FJ0R94201455	J	56k 1/2W Chip	
R740	9FJ0R94201005	J	10 1/2W Chip	AC

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
RDENC0327CEZZ					CABINET AND MECHANICAL PARTS				
POWER UNIT(Continued)									
R741	9FJ0R94201085	J	47 1/2W Chip		1	<i>Not Available</i>	-	Top Body Ass'y	—
R742	9FJ0R91201430	J	620 1/10W Chip		1-1	DBDYT1205CE01	J	Top Body Ass'y	BQ
△ R743	9FJ0R22001430	J	0.1 5W Cement	AF	1-1-1	<i>Not Available</i>	-	Top Body	—
R744	9FJ0R91201195	J	390 1/10W Chip	AB	1-1-2	PMLT-0388CEZZ	J	Molt, x2	AC
R745	9FJ0R91201435	J	39k 1/10W Chip	AB	1-1-3	PMLT-0392CEZZ	J	Molt	AD
R746	9FJ0R91201445	J	47k 1/10W Chip	AB	1-1-4	PSPAT0037CEZZ	J	Tefron Tape	AC
R747	9FJ0R91201245	J	1K 1/10W Chip	AB	1-2	LX-NZ3172CEFF	J	Speed Nut x3	AD
R748	9FJ0R91201365	J	10k 1/10W Chip	AB	1-3	PCOV1094CEKZ	J	Filter Duct	AF
△ R749	9FJ0R32001005	J	15M 1W Metal	AE	1-4	PFILD0130CEZZ	J	Side Filter	AF
R750	9FJ0R91201225	J	680 1/10W Chip	AB	1-5	PSLDM4667CEFW	J	Shield Cover	AE
R751	9FJ0R91201285	J	2.2k 1/10W Chip	AB	1-6	QSW-Z0533CEZZ	J	Operation Key Unit	BB
R752	9FJ0R91201325	J	4.7k 1/10W Chip	AB	1-7	XBBS030P06000	J	Screw, x3	AA
R753	9FJ0R91202575	J	5.6k 1/10W Chip		2	<i>Not Available</i>	-	Rear Body Ass'y	—
R754	9FJ0R91001165	J	3.3k 1/10W Chip		2-1	DBDYR1097CE01	J	Rear Body Ass'y (XG-P20XU)	BF
R755	9FJ0R94201285	J	2.2k 1/2W Chip	AD	2-1-1	<i>Not Available</i>	-	Rear Body	—
R756	9FJ0R91201285	J	2.2k 1/10W Chip	AB	2-1-2	HINDP5745CESA	J	Terminal Label (XG-P20XU)	AH
R757	9FJ0R94201005	J	10 1/2W Chip	AC	2-2	GCOVA1824CESA	J	R/C Cover	AD
R758	9FJ0R94201085	J	47 1/2W Chip		3	<i>Not Available</i>	-	Bottom Body Ass'y	—
R759	9FJ0R94201005	J	10 1/2W Chip	AC	3-1	DBDYU1133CE01	J	Bottom Body Ass'y (XG-P20XU)	BT
R760	9FJ0R94201085	J	47 1/2W Chip		3-1	DBDYU1133CE02	J	Bottom Body Ass'y (XG-P20XE for Europe)	BS
R761	9FJ0R94300015	J	47 1/2W Chip		3-1	DBDYU1133CE03	J	Bottom Body Ass'y (XG-P20XE for Australia)	BS
R762	9FJ0R91001075	J	4.7k 1/10W Chip		3-1	DBDYU1133CE04	J	Bottom Body Ass'y (XG-P20XD)	BS
MISCELLANEOUSPARTS					3-1-1	<i>Not Available</i>	-	Bottom Body	—
△ TF701	9FJ0E03001100	J	Fuse	AE	3-1-2	GLEGG9094CE00	J	Leg	AF
△ RL701	9FJ0H11501390	J	Relay		3-1-3	HINDP5399CESF	J	INTERLOCK(FRA)	AC
△ RL702	9FJ0H11501390	J	Relay		3-1-4	HINDP5746CESA	J	INTERLOCK(ENG)	AE
PL	9FJ0I10008280	J	Hernece		3-1-5	HINDP5748CESA	J	FCC Label (XG-P20XU)	AE
EA	9FJ0I10008290	J	Hernece		3-1-5	HINDP5806CESA	J	Caution Label (XG-P20XE/XD)	
IN	9FJ0I10008270	J	Hernece		3-1-6	HINDP5750CEZZ	J	Model Label (XG-P20XU)	AL
CB	9FJ0I10000830	J	Hernece		3-1-6	HINDP5808CEZZ	J	Model Label (XG-P20XE for Europe)	AN
	9FJ0I100008320	J	Hernece		3-1-6	HINDP5809CEZZ	J	Model Label(XG-P20XE for Australia)	AN
	9FJ0I10008330	J	Hernece		3-1-6	HINDP5906CEZZ	J	Model Label(XG-P20XD)	
	9FJ0I10008340	J	Hernece		3-1-7	LANGF2134CEFW	J	K Lock	AE
	9FJ0O00002650	J	Heat Sink for D702		3-1-8	LHLDZ2077CEKZ	J	K Lock Cover	AD
	9FJ0O00002640	J	Heat Sink for Q701		3-1-9	LHLDZ2174CEKZ	J	Boss	AE
	9FJ0O00002660	J	Heat Sink		3-1-10	PCOVZ3027CESA	J	Cover	AG
	9FJ0A11002310	J	Sheet		3-1-11	PFILD0129CEZZ	J	Filter	AD
	9FJ0S20003100	J	Screw		3-1-12	PFILD0134CEZZ	J	Net Filter	AG
	9FJ0S29003060	J	Screw	AB	3-1-13	PSPAG0330CE00	J	Rubber Spacer	AF
	9FJ0S26003080	J	Screw		3-1-14	PSPAT0038CEZZ	J	Spacer, x2	AC
	9FJ0B00001160	J	Silicone rubber	BD	3-1-15	PSPAT0075CEZZ	J	Spacer, x4	AD
	9FJ0B00001160	J	Silicone rubber	BD	3-2	CBFL-1088CE01	J	Spaeaker Ass'y (R)	AL
	9FJ0A20001530	J	Glass Tube		3-2-2	PSPAH0693CEZZ	J	Spacer, x2	AB
	9FJ0G20003010	J	Clamp		3-2-3	PSPAH0697CEZZ	J	Spacer, x2	AA
	9FJ0G20010200	J	Insulok Tie		3-2-4	PSPAH0698CEZZ	J	Spacer, x2	AE
					3-3	CBFL-1089CE01	J	Spaeaker Ass'y (L)	AL
					3-3-2	PSPAH0693CEZZ	J	Spacer, x2	AB
					3-3-3	PSPAH0697CEZZ	J	Spacer, x2	AA
					3-3-4	PSPAH0698CEZZ	J	Spacer, x2	AE
					3-4	CCOVA1664CE01	J	Filter Cover Ass'y	AS
					3-4-1	<i>Not Available</i>	-	Filetr Cover	—
					3-4-2	HPNC-0410CESA	J	Panching Net	AK
					3-4-3	PCOVM9029CEKZ	J	Cover	AD
					3-5	<i>Not Available</i>	-	Lamp Door Ass'y	—
					3-5-1	DCOVA1961CE01	J	Lamp Door Ass'y	AV
					3-5-1-1	<i>Not Available</i>	-	Lamp Door	—
					3-5-1-2	HINDP5747CEZZ	J	User Caution(E)	AD
					3-5-1-3	HINDP5751CEZZ	J	User Caution(F)	AE
					3-5-1-4	PCOVM1018CEKZ	J	Cover	AF
					3-5-2	LX-BZ1009CEFF	J	Screw	AD
					3-5-3	MSPRC0202CEFW	J	Spring	AB
					3-5-4	XRESJ30-06000	J	E-Ring	AA
					3-6	CCOVP1093CE01	J	Barrier (L) Ass'y	AM
					3-6-1	<i>Not Available</i>	-	Barrier (L)	—

Ref. No.	Part No.	★	Description	Code
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CABINET AND MECHANICAL PARTS

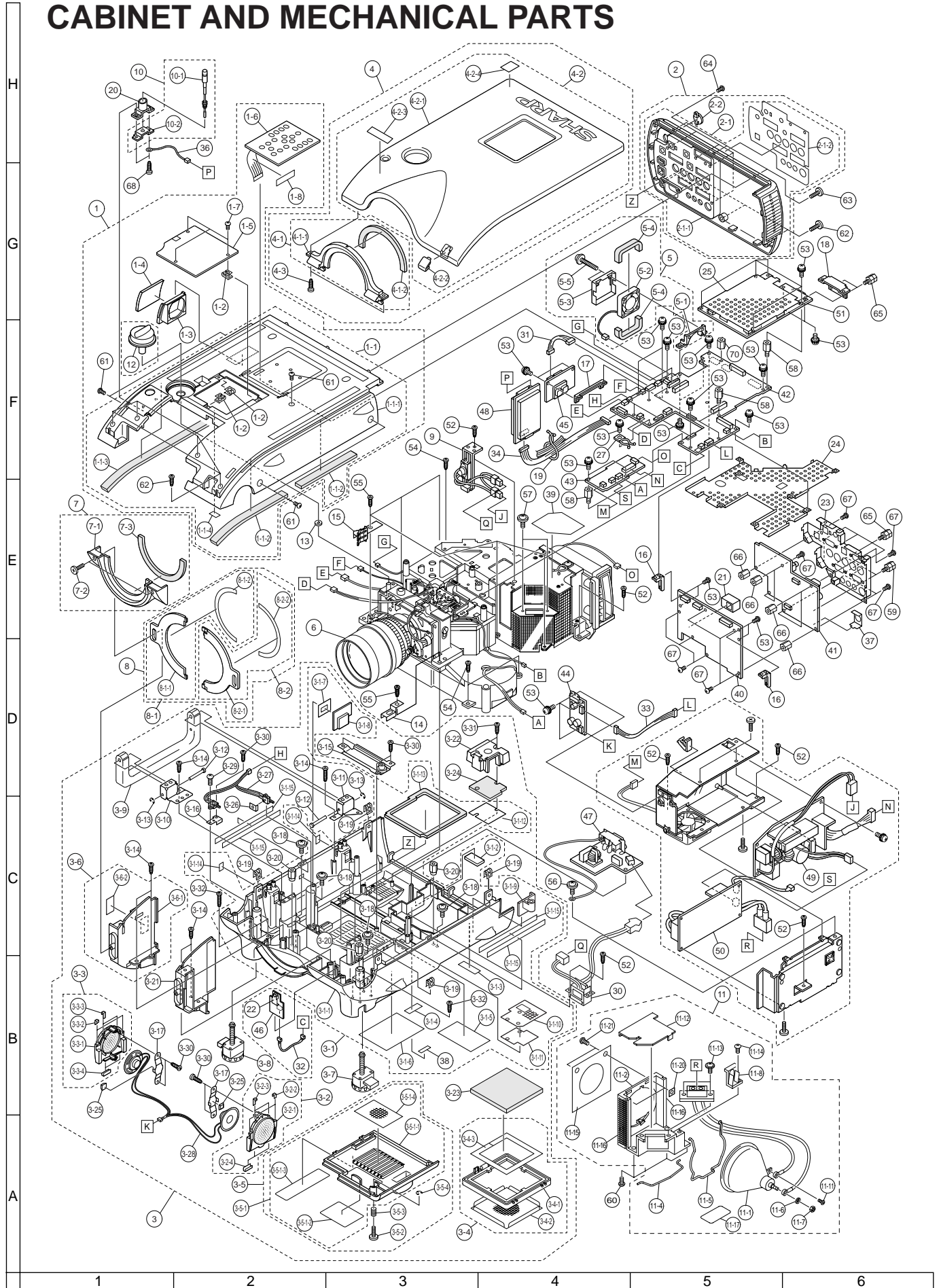
(Continued)

3-6-2	PSPAT0074CEZZ	J	Spacer	AC
3-7	GLEGP1033CEKA	J	Adjuster(R)	AW
3-8	GLEGP3033CEKA	J	Adjuster(L)	AW
3-9	JHND1037CESA	J	Handle	AR
3-10	LANGF9561CEFD	J	Handle Angle(F)	AK
3-11	LANGF9562CEFW	J	Handle Angle(R)	AG
3-12	NSFTH0016CE00	J	Handle Shaft, x2	AD
3-13	XRESJ30-06000	J	E-Ring, x2	AA
3-14	XEPSD40P12000	J	Screw, x6	AA
3-15	LANGK0769CEFD	J	Ceiling Mount	AN
3-16	LANGQ1345CEFW	J	Leaf Switch Angle	AD
3-17	LANGS0125CEFW	J	Speaker Angle, x2	AE
3-18	LX-HZ3106CEFD	J	Screw, x4	AB
3-19	LX-NZ3155CEFF	J	Speed Nut, x4	AF
3-20	LX-NZ3173CEFW	J	Nut, x3	AD
3-21	PCOV1092CEKZ	J	Barrier(R)	AL
3-22	PDUC-0152CEKZ	J	Duct	AG
3-23	PFILD0079CEZZ	J	Filter	AD
3-24	PFILD0132CEZZ	J	Filter	AC
3-25	PSPAG0331CE00	J	Rubber Spacer, x2	AC
3-26	PZETK0072CEKZ	J	Leaf Switch Barrier	AB
3-27	QCNW-5925CEZZ	J	Leaf Switch	AK
3-28	QCNW-5934CEZZ	J	SP Wire Ass'y	AD
3-29	XBPSF26P06000	J	Screw	AA
3-30	XEBSD30P10000	J	Screw, x8	AA
3-31	XEBSD30P12000	J	Screw, x2	AA
3-32	XEBSD30P14000	J	Screw, x8	AA
4	Not Available	-	Top Cover Ass'y	—
4-1	CCOVA1960CE01	J	Upper Cover Ass'y	AS
4-1-1	Not Available	-	Upper Cover	—
4-1-2	PMLT-0382CEZZ	J	Spacer	AH
4-2	DCOVA1958CE01	J	Top Cover Ass'y (XG-P20XU)	BB
4-2	DCOVA1992CE01	J	Top Cover Ass'y (XG-P20XE)	BB
4-2	DCOVA1993CE01	J	Top Cover Ass'y (XG-P20XD)	BB
4-2-1	Not Available	-	Top Cover	—
4-2-2	GCOVA1962CESA	J	R/C Cover	AE
4-2-3	HINDP5799CESA	J	Lens Caution	AD
4-2-4	HINDP5459CESA	J	IQ Logo Label (XG-P20XU)	AD
4-3	XEPSD40P12000	J	Screw, x2	AA
5	Not Available	-	IC Fan Unit	—
5-1	LANGT3299CEFW	J	IC Fan Angle	AF
5-2	NFANR0121CE00	J	IC Fan	AZ
5-3	PSLDM4677CEFW	J	IC Fan Shield	AF
5-4	PSPAZ0430CEZZ	J	Spacer, x2	AA
5-5	XBBS30P14000	J	Screw, x2	AA
6	Refer to Optics Mechanism Parts			
7	CCOVA1959CE01	J	Under Cover Ass'y	AT
7-1	Not Available	-	Under Cover	—
7-2	LX-BZ3445CEFF	J	Screw, x2	AD
7-3	PMLT-0382CEZZ	J	Spacer	AH
8	Not Available	-	Lens Shutter Ass'y	—
8-1	DCOVA1963CE01	J	Lens Shutter (L) Ass'y	AK
8-1-1	Not Available	-	Lens Shutter (L)	—
8-1-2	PSPAT0078CEZZ	J	Tape	AE
8-2	DCOVA1964CE01	J	Lens Shutter (R) Ass'y	AK
8-2-1	Not Available	-	Lens Shutter (R)	—
8-2-2	PSPAT0078CEZZ	J	tape	AE
9	CBiM-0104DE02	J	Bi-Metal Unit	
10	Not Available	-	Antenna Unit	—
10-1	QANTZ0010CESA	J	Antenna	
10-2	LANGK0780CEFW	J	Antenna Angel	
△ 11	BQC-XGP20X//1	J	Metal-Halide lamp Unit	CQ
△ 11-1	RLMPF0072CEZZ	J	Lamp/Mirror Ass'y	CL
11-2	PCASZ1042CEKZ	J	lamp case	AS

Ref. No.	Part No.	★	Description	Code
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11-4	LHLDZ3054CEFW	J	Handle	AE
11-5	MSPRK0099CEFW	J	Spring	AK
11-6	XWSBN50-13000	J	Washer	AB
11-7	XNEBN50-40000	J	Nut	AB
11-8	PCOVZ1092CEKZ	J	Cover	AF
11-11	LX-BZ3270CEFN	J	Screw	AA
11-12	PSLDP3061CEFW	J	Shielding Plate	AE
11-13	LX-HZ3106CEFD	J	Screw, x2	AB
11-14	XEBSD30P10000	J	Screw	AA
11-15	PCOVZ3023CEFW	J	Cover for Lamp	AN
11-16	HPNC-0463CEFW	J	Net, x2	AF
11-17	TLABZ0777CEZZ	J	BQC-LABEL	AE
11-20	LANGK0779CEFW	J	Angle	AE
11-21	LX-BZ3425CEFN	J	Screw	AA
12	JKNBZ1081CEKA	J	Shift Knob	AN
13	PSPAZ0439CEZZ	J	Spacer	AC
14	QEARP0124CEFW	J	Earth, Ballast	AE
15	QEARP0131CEFW	J	Earth, Gyro	AG
16	LANGT3300CEFW	J	Angle, x2	AE
17	LANGT3301CEFW	J	Angle	AE
18	LANGT3302CEFN	J	DVI Angle	
19	LHLDW1080CEZZ	J	Wire Holder	AA
20	PCOVZ1100CEKA	J	Antenna Cover	AE
21	PMLT-0390CEZZ	J	Molt	AC
22	PSLDC3117CEFW	J	R/C Shield	AD
23	PSLDM4661CEFW	J	Terminal Shield	AL
24	PSLDM4663CEFW	J	Output Shield	AQ
25	PSLDM4664CEFW	J	PC I/F Shield	AK
27	LHLDW1046CEZZ	J	Wire Holder	AA
30	QCNW-5919CEZZ	J	Connecting Cord	AU
31	QCNW-5921CEZZ	J	Connecting Cord	AE
32	QCNW-5922CEZZ	J	Connecting Cord	AE
33	QCNW-5924CEZZ	J	Connecting Cord	AF
34	QCNW-5927CEZZ	J	Connecting Cord	AG
36	QCNW-6050CEZZ	J	Connecting Cord	AG
37	QEARP0093CEFN	J	Earth	AE
38	TLABN0326CEZZ	J	Serial Number Label (XG-P20XU)	AD
38	TLABN0343CEZZ	J	Serial Number Label (XG-P20XE for Europe)	AG
38	TLABN0344CEZZ	J	Serial Number Label (XG-P20XE for Australia)	AG
38	TLABN0403CEZZ	J	Serial Number Label (XG-P20XD)	AG
39	TLABZ0790CEZZ	J	Caution Lavel (XG-P20XU)	AD
40	Not Available	-	Signal Unit	—
41	Not Available	-	Input Unit	—
42	Not Available	-	OUTPUT Unit	—
43	Not Available	-	Output Sub Unit	—
44	Not Available	-	Speaker Out Unit	—
45	Not Available	-	DC/DC Converter Unit	—
46	Not Available	-	R/C Receiver Unit	—
47	Not Available	-	AC Inlet Unit	—
48	RUNTK0701CEZZ	-	GYRO-Unit	BR
49	Not Available	-	POWER Unit	—
50	RDENC0328CEZZ	-	BALLAST Unit	CB
51	CPCi-0054CE02	-	PC I/F Unit	**
52	XEBSD30P10000	J	Screw, x7	AA
53	XBPSD30P06R00	J	Screw, x31	AB
54	XEPSD40P16000	J	Screw, x3	AA
55	XEBSD40P25000	J	Screw, x6	AA
56	XBPSD40P08JS0	J	Screw	AA
57	LX-HZ3106CEFD	J	Screw, x2	AB
58	NSFTZ0106CEFW	J	Shaft, x5	AC
59	NSFTZ0135CEFW	J	Shaft, x4	AD
60	XBTSC40P12000	J	Screw, x3	AB
61	LX-HZ3084CEFF	J	Screw, x5	AB
62	XEPSF40P12000	J	Screw, x7	AA
63	XEBSD30P14000	J	Screw, x3	AA
64	XBPSF30P10000	J	Screw, x6	AA
65	NSFTZ0134CEZZ	J	Shaft, x6	
66	NSFTZ0140CEFW	J	Shaft, x6	AC
67	XBPSD26P04000	J	Screw, x12	AA
68	XEBSD30P12000	J	Screw, x2	AA
70	NSFTZ0145CEFW	J	Shaft	AD

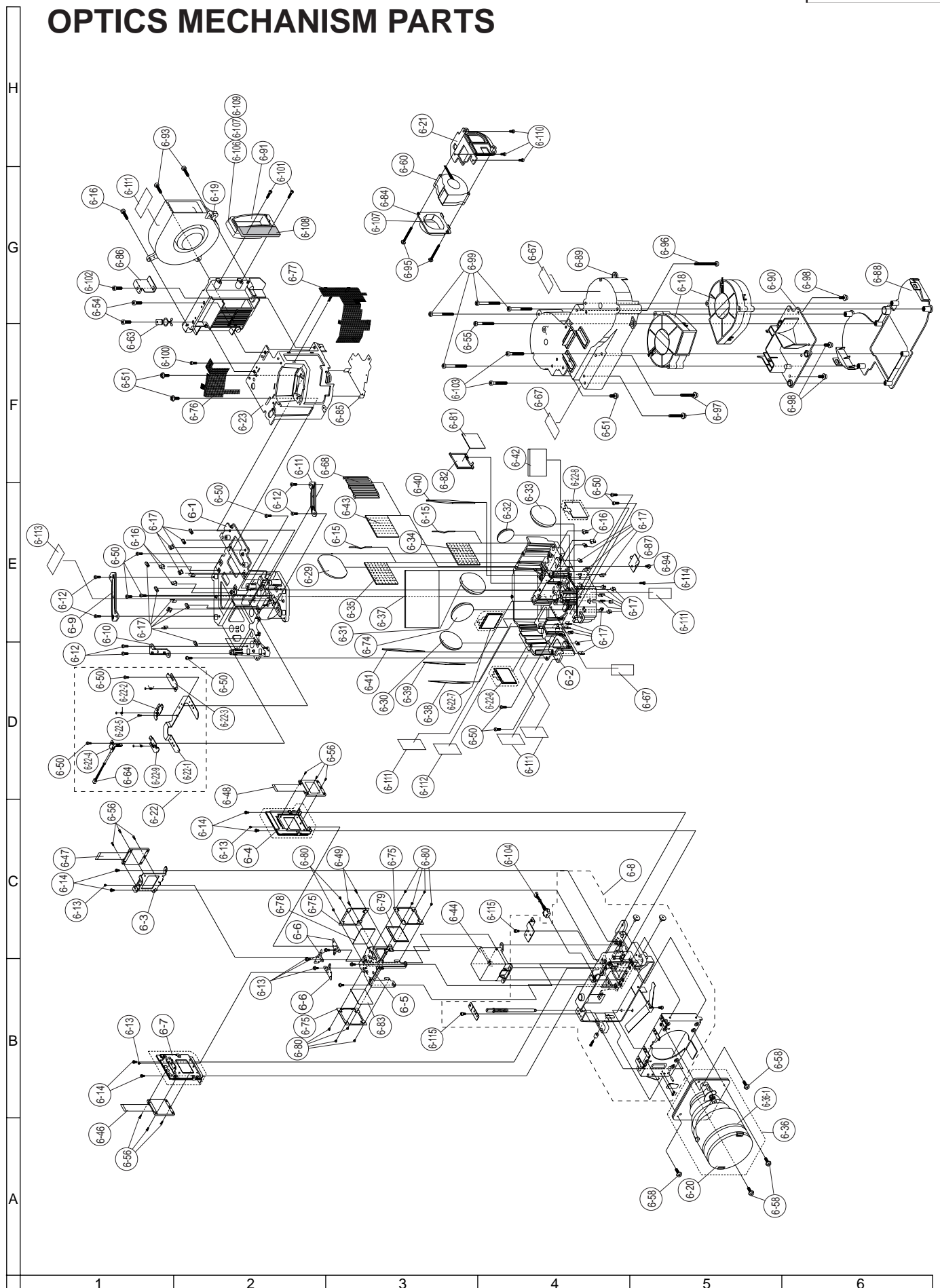
CABINET AND MECHANICAL PARTS



Ref. No.	Part No.	★	Description	Code
OPTICS MECHANISM PARTS				
6	CCHSK0062CE12	J	Optics Macha. Ass'y	HE
6-1	LCHSK0102CEKZ	J	Optics Mecha. Cover	BF
6-2	LCHSK0101CEKZ	J	Optics Mecha. Base	BE
6-3	LANGG1174CEFW	J	G Adjusting Plate	AP
6-4	CANGG1161CE03	J	B Adjusting Plate	AY
6-5	LANGG1195CEFW	J	Guide Plate-Top	AP
6-6	LANGG1126CEFW	J	Slide Plate, x3	AG
6-7	CANGG1161CE03	J	R Adjusting Plate	AY
6-8	CHLDZ8007CE00	J	Lens Shift Unit	BT
6-9	LHLDZ9134CEKZ	J	M1 Adjust Lever	AG
6-10	LHLDZ9135CEKZ	J	M5 Adjust Lever	AF
6-11	LHLDZ9136CEKZ	J	M6 Adjust Lever	AF
6-12	LX-BZ3405CEFD	J	Screw M3-8, x6	AB
6-13	LX-BZ3370CEFD	J	Screw M2.66-6wsw, x9	AB
6-14	LX-BZ3388CEFD	J	Screw M2.6-5, x6	AE
6-15	MSPRP1199CEFW	J	Flyeye Fitting Spring, x2	AD
6-16	MSPRP1197CEFW	J	PBS Fitting Spring, x4	AE
6-17	MSPRP1198CEFW	J	Mirror Fitting Spring, x28	AD
6-18	NFANS0026CE00	J	Cooling Fan (Intake), x2	BA
6-19	NFANS0025CE00	J	Cooling Fan (Exhaust), x1	BC
6-20	PCAPH1056CESA	J	Lens Cap	AW
6-21	PDUC-0137CEKZ	J	PBS Duct Cover	AH
6-22	CANGG0107CE03	J	Polarizer Fixing Plate	CC
			Adjusting Mechanism Ass'y	
6-22-1	LANGU9034CEFW	J	Polarizer Fixing Plate	AH
6-22-2	LANGU9035CEFW	J	Polarizer Fixing Plate	AF
			Adjusting Lever G, x1	
6-22-3	LANGU9084CEFW	J	Polarizer Fixing Plate	AH
			Adjusting Lever B	
6-22-4	LANGU9082CEFW	J	Thermistor Angle	AE
6-22-5	XBBS020P04000	J	Screw, x1	AA
6-22-6	CANGU9037CE09	J	Polarizer Input Filter-R	BD
6-22-7	CANGU9037CE07	J	Polarizer Input Filter-G	BN
6-22-9	LANGU9083CEFW	J	PF Lever R	AH
6-23	PDUC-0120CEKZ	J	Duct Holder	AV
6-24	PDUC-0136CEKZ	J	Side Duct	AU
6-28	PGIDH0032CEFW	J	Flap	AG
6-29	PLNS-0126CEZZ	J	L1	BM
6-30	PLNS-0127CEZZ	J	L2, R	AZ
6-31	PLNS-0214CEZZ	J	G01	AZ
6-32	PLNS-0129CEZZ	J	G02	AW
6-33	PLNS-0214CEZZ	J	G03	BA
6-34	PLNS-0131CEZZ	J	Flyeye Lens (Incoming-Light)	BR
6-35	PLNS-0132CEZZ	J	Flyeye Lens (Outgoing-Light)	BP
6-36	CLNS-0236CE01	J	Projection Lens	CR
6-36-1	PMLT-0359CEZZ	J	Lens Spacer	AS
6-37	PMIR-0183CEZZ	J	Mirror-1	AP
6-38	PMIR-0268CEZZ	J	Mirror-2	BF
6-39	PMIR-0237CEZZ	J	Mirror-3	BL
6-40	PMIR-0186CEZZ	J	Mirror-4	AN
6-41	PMIR-0187CEZZ	J	Mirror-5	AN
6-42	PMIR-0186CEZZ	J	Mirror-6	AN
6-43	PMIR-0269CEZZ	J	PBS	CA
6-44	PMIR-0289CEZZ	J	Cross Prism (with Base)	CK
6-46	RLCDP0129CEZZ	J	LCD Module Unit, Red	DL
6-47	RLCDP0130CEZZ	J	LCD Module Unit, Green	DL
6-48	RLCDP0131CEZZ	J	LCD Module Unit, Blue	DL
6-49	XAPSF20P05000	J	Screw M2-5, x2	AA
6-50	XBBS030P08000	J	Screw M3-8, x15	AA
6-51	XBPSD40P10JS0	J	Screw M4-10, x3	AA
6-54	XEBSD40P12000	J	Screw M4-12 x2	AA
6-55	XEPSD40P35000	J	Screw M4-35, x1	AA
6-56	XSSSF20P06000	J	Screw M2-6, x9	AA
6-57	LANGK0771CEFW	J	PWB Plate	AG
6-58	LX-BZ3404CEFD	J	Screw M4-10, x4	AB
6-60	NFANS0027CE00	J	Fan	AZ
6-63	LHLDW1046CEZZ	J	Wire Holder	AA
6-64	RH-HZ0048CEZZ	J	Thermistor (Q)	AN
6-67	PSPAT0003CEZZ	J	Teflon Tape, x3	AA

Ref. No.	Part No.	★	Description	Code
6-68	PSLDP3085CEFW	J	PBS Aperture	AG
6-74	PLNS-0127CEZZ	J	L2, G	AZ
6-75	LANGK0770CEFW	J	PF Plate for GB out PF, x3	AH
6-76	PCOVZ3007CEFW	J	Net	AG
6-77	PCOVZ3026CEFW	J	Net	AH
6-78	PFILW0282CEZZ	J	G Out PF	BN
6-79	PFILW0282CEZZ	J	B Out PF	BN
6-80	XiPSF20P02000	J	Screw, x14	AA
6-81	PFILW0270CEZZ	J	UV Filter	BB
6-82	PSLDP9036CEFW	J	UV Aperture	AF
6-83	PFILW0281CEZZ	J	R Out PF	BN
6-84	PDUC-0153CEKZ	J	PBS Duct	AG
6-85	PSLDH3088CEFW	J	Lamp Shield	AE
6-86	LANGF9566CEFW	J	Reinforce Angle	AE
6-87	LANGG0115CEFW	J	Angle	AD
6-88	PDUC-0138CEKZ	J	Intake Duct Cover	AN
6-89	PDUC-0139CEKZ	J	Intake Duct Base	AU
6-90	PDUC-0140CEKZ	J	Intake Duct Guide	AN
6-91	PDUC-0141CEKZ	J	Exhaust Duct	AH
6-92	LANGK0772CEFW	J	PWB Plate	AE
6-93	XEPSD40P16000	J	Screw, x3	AA
6-94	XBPSD30P06KS0	J	Screw	AA
6-95	XBPSD30P35WS0	J	Screw, x2	AB
6-96	XBPSD40P45JS0	J	Screw	AB
6-97	XBPSD40P30JS0	J	Screw, x2	AB
6-98	XEBSD30P12000	J	Screw, x5	AA
6-99	XEBSD40P45000	J	Screw, x4	AC
6-100	XEPSD30P08000	J	Screw	AA
6-101	XEPSD40P10000	J	Screw, x2	AA
6-102	XEPSD40P14000	J	Screw	AA
6-103	XEPSF40P30000	J	Screw, x2	AB
6-104	QCNW-5923CEZZ	J	Connecting Cord	AF
6-105	RH-HZ0080CEZZ	J	TEMP. Sensor	AL
6-106	PSPAZ0418CEZZ	J	Spacer	AC
6-107	PSPAZ0425CEZZ	J	Spacer	AC
6-108	PSPAZ0429CEZZ	J	Spacer	AC
6-109	Not Available	-	Spacer	—
6-110	XBPSD30P06000	J	Screw, x3	AA
6-111	PSPAT0076CEZZ	J	Teflon Tape, x5	AC
6-112	PSPAT0077CEZZ	J	Teflon Tape	AD
6-113	Not Available	-	Tape	—
6-114	XBBS026P08000	J	Screw	AA
6-115	XBPSD30P05J00	J	Screw, x4	AA
6-116	XBPSD26P06000	J	Screw, x2	AA
6-118	LANGK0778CEFW	J	Screen	AK

OPTICS MECHANISM PARTS



Ref. No.	Part No.	★	Description	Code
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SUPPLIED ACCESSORIES

ACCESSORIES

△	PFI00080CEZZ	J	Extra Air Filter	AE
△	QACCU5013CEZZ	J	AC Cord (for U.S.A and Canada)	AX
△	QACCL3022CEZZ	J	AC Cord (for Australia)	AZ
△	QACCV4002CEZZ	J	AC Cord (for Europe/P20XD)	AZ
△	QACCB5024CENA	J	AC Cord (for U.K. and Hong Kong)	AZ
	QCNW-5304CEZZ	J	Computer Cable	AV
	QCNW-4870CEZZ	J	Computer Audio Cable	AQ
	QCNW-5916CEZZ	J	USB Cable	AS
	QCNW-5943CEZZ	J	Wired R/C Cable	AK
	QPLGJ0107GEZZ	J	BNC-RCA Adaptor, x3	AR
	RRMCG1631CESA	J	Wireless R/C Unit (XG-P20XU)	BZ
	RRMCG1653CESA	J	Wireless R/C Unit (XG-P20XE)	CB
	CRMCG1654DE02	J	Wireless R/C Unit (XG-P20XD)	CB
	UDSKA0043CEN1	J	CD-ROM (XG-P20XU)	AQ
	UDSKA0045CEN1	J	CD-ROM (XG-P20XE/XD)	AQ
	TCAUZ0010CEZZ	J	Caution (XG-P20XU)	AZ
	TiNS-7354CEZZ	J	Operation Manual (XG-P20XU)	AZ
	TiNS-7403CEZZ	J	Operation Manual (XG-P20XE)	AZ
	TiNS-7409CEZZ	J	Operation Manual (XG-P20XD)	AZ
	TiNS-7355CEZZ	J	Quick Reference (XG-P20XU)	AG
	TiNS-7404CEZZ	J	Quick Reference (XG-P20XE)	AG
	TiNS-7405CEZZ	J	Quick Reference (XG-P20XD)	AG
	TiNS-7500CEZZ	J	Quick Reference (XG-P20XD)	AG
	TiNS-7356CEZZ	J	CD-ROM Manual (XG-P20XU)	AX
	TiNS-7406CEZZ	J	CD-ROM Manual (XG-P20XE)	AX
	TiNS-7407CEZZ	J	CD-ROM Manual (XG-P20XD)	AX
	PCAPH1056CESA	J	Lens Cap	AW
	TLABZ0781CEZZ	J	ID Label	AD

ACCESSORIES (NOT REPLACEMENT ITEM)

TCADE3012CEZZ	—	Questionnaire Card (Back for Japanese Sending)	—
TCAUZ3050CEZZ	—	Soft Wear Caution (XG-P20XU)	—
TCAUZ3036CEZZ	—	Soft Wear Caution (XG-P20XE/XD)	—
TCAUZ3033CEZZ	—	Soft Waer Caution (XG-P20XU for Canada)	—
TGAN-1540CEZZ	—	ER (XG-P20XU for U.S.A.)	—
TGAN-1542CEZZ	—	ER (XG-P20XU for Canada)	—
TGANE0050CEZZ	—	Guarantee card (XG-P20XE for Australia)	—
—	—	Four AAA Size Batteries	—

Ref. No.	Part No.	★	Description	Code
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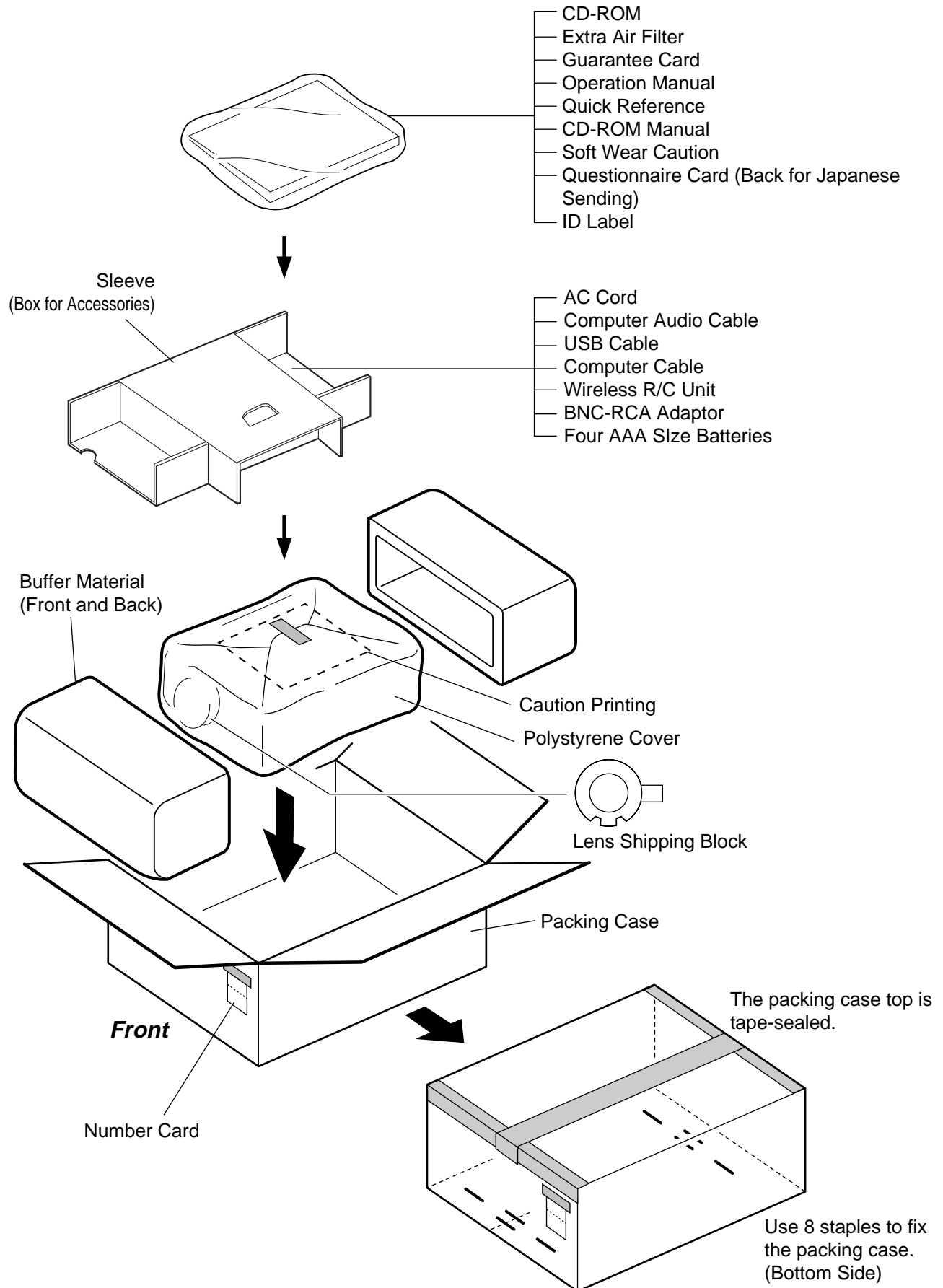
PACKING PARTS (NOT REPLACEMENT ITEM)

SPAKC5526CEZZ	—	Packing Case (XG-P20XU)	—
SPAKC5546CEZZ	—	Packing Case (XG-P20XE)	—
SPAKC5547CEZZ	—	Packing Case (XG-P20XD)	—
SPAKP0809CEZZ	—	Polystyrene Cover	—
SPAKX2951CEZZ	—	Buffer Material	—
SPAKF0505CEZZ	—	Sleeve(Box for Accessories)	—
TLABK0001TAZZ	—	Number Card	—
SPAKX2965CEZZ	—	Lens Shipping Block	—
TCAUK3040CEZZ	—	Caution Printing	—

SERVICE JIGS (Use for servicing)

9DASPN-XGNV1U	J	Spanna, 3.2mm (Off-set Cam Adjustment)	BL
9EQDRiVER-NV1A	J	Off-set Driver (Focus Adjustment)	CA
9EQLNC-XGNV1U	J	Hexagon Wrench, 2mm (Convergence Adjustment)	BA
QCNW-5913CEZZ	J	Extension Cable 20-pin Signal ()-Output (), Signal ()-Output ()	BY
QCNW-4767CEZZ	J	Extension Cable 30-pin Input (ST)-Signal Input (ST)-Signal	BT
QCNW-5057CEZZ	J	Extension Cable 60-pin Output (TC2)-PC I/F (TC2), Output (TC3)-PC I/F (TC3)	CD
QCNW-4852CEZZ	J	Extension Cable 32-pin LCD Panel-Output	BH
QCNW-6009CEZZ	J	Extension Cable 30-pin Signal -Output	BU

PACKING OF THE SET / VERPACKEN DES GERÄTS



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